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(54) Title: ANTIGENIC PEPTIDES, SUCH AS FOR G PROTEIN-COUPLED RECEPTORS (GPCRS), ANTIBODIES THERETO, AND SYSTEMS FOR IDENTIFYING SUCH ANTIGENIC PEPTIDES

(57) Abstract: The present invention provides antigenic peptides for GPCRs and antibodies relating thereto, and related systems, methods, compositions, and the like, such as diagnostics and medicaments. Where antibodies against a given GPCR are not known, the present invention provides such antibodies, and preferred antigenic sequences for producing such antibodies. Where antibodies against a given GPCR are known, the present invention provides preferred antigenic peptides for producing antibodies that exhibit improved specificity, affinity or capacity to perform antibody-related actions relative to the known antibodies.

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ANTIGENIC PEPTIDES, SUCH AS FOR G PROTEIN-COUPLED RECEPTORS
(GPCRS), ANTIBODIES THERETO, AND SYSTEMS FOR IDENTIFYING SUCH
ANTIGENIC PEPTIDES

5 CROSS-REFERENCE TO RELATED APPLICATIONS

[1] The present application claims priority from United States provisional patent application No. 60/257,144, filed December 19, 2000 and presently pending.

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LPHIC:

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10 ABSTRACT

[3]

BACKGROUND

[4] G protein-coupled receptors (GPCRs) are a large group of proteins that transmit signals across cell membranes. In general terms, GPCRs function somewhat like doorbells.
15 When a molecule outside the cell contacts the GPCR (pushes the doorbell), the GPCR changes its shape and activates "G proteins" inside the cell (similar to the doorbell causing the bell to ring inside the house, which in turn causes people inside to answer the door). GPCRs are like high-security doorbells because each GPCR responds to only one specific kind of signaling molecule (called its "endogenous ligand"), kind of like a high-tech door
20 lock that responds to only one fingerprint. Part of the GPCR is located outside the cell (the "extracellular domain"), part spans the cell's membrane (the "transmembrane domain"), and part is located inside the cell (the "intracellular domain"). Thus, GPCRs are embedded in the outer membrane of a cell and recognize and bind certain signaling molecules that are present in the spaces surrounding the cell. GPCRs are used by cells to keep an eye on the cells' own
25 activity and on the environment. In organisms that have many cells, the cells use GPCRs to talk to each other.

[5] GPCRs are important to the pharmaceutical industry and other industries. For example, many drugs, including some antibody-based drugs, act by binding to specific GPCRs and initiating or inhibiting their intracellular actions, and diagnostics and therapeutics
30 based on GPCRs or on antibodies for GPCRs are becoming increasingly important.

[6] General concepts about GPCRs are discussed in more scientific terms in the following paragraphs.

[7] The GPCR superfamily has at least 250 members, Strader et al., FASEB J., 9:745-754 (1995); Strader et al., Annu. Rev. Biochem., 63:101-32 (1994). GPCRs play important

roles in diverse cellular processes including cell proliferation and differentiation, leukocyte migration in response to inflammation, gene transcription, vision (the rhodopsins), smell (the olfactory receptors), neurotransmission (muscarinic acetylcholine, dopamine, and adrenergic receptors), and hormonal response (luteinizing hormone and thyroid-stimulating hormone receptors). Strader et al., *supra*; U.S. Patent nos. 5,994,097 and 6,063,596. Many important drugs produce their therapeutic actions through their interaction with GPCRs.

[8] Nucleotide and amino acid sequences for many GPCRs have been reported and can be found in public databases such as GenBank and GenPept. Generally speaking, different GPCRs show both structural and sequence similarities. The most conserved domains of GPCRs are the transmembrane domains and the first two cytoplasmic loops. GPCRs range in size from under 400 to over 1000 amino acids. Coughlin, S. R., *Curr. Opin. Cell Biol.* 6:191-197 (1994). They contain seven hydrophobic transmembrane regions that span the cellular membrane and form a bundle of antiparallel alpha helices. McKee K.K., *supra*. The bundle of helices forming the transmembrane regions provide many structural and functional features of the receptor. In most cases, the bundle of helices form a pocket that binds a signaling molecule. However, when the binding site accommodates larger molecules, the extracellular N-terminal segment or one or more of the three extracellular loops participate in binding and in subsequent induction of conformational change in the intracellular portions of the receptor. These helices are joined at their ends by three intracellular and three extracellular loops. GPCRs also contain cysteine disulfide bridges between the second and third extracellular loops, an extracellular N-terminus, and a cytoplasmic or intracellular C-terminus. The N-terminus is often glycosylated, while the C-terminus is generally phosphorylated. A conserved, acidic-Arg-aromatic triplet present in the second cytoplasmic loop may interact with G Proteins. Most GPCRs contain a characteristic consensus pattern. Watson, S. and S. Arkinstall, *The G protein Linked Receptor Facts Book*, Academic Press, San Diego, CA (1994); Bolander, F. F. *Molecular Endocrinology*, Academic Press, San Diego, CA (1994).

[9] Although GPCRs have many features in common, each GPCR has its own unique characteristics as well. GPCRs have varying nucleotide and amino acid sequences, and varying antigenicity. GPCRs bind a diverse array of specific, extracellular signaling molecules (which can also be referred to as "ligands") including peptides, cytokines, hormones, neurotransmitters, growth factors, and specialized stimuli such as photons,

flavorants, and odorants. Identified ligands include, for example, purines, nucleotides (*e.g.*, adenosine, cAMP, NTPs), biogenic amines (*e.g.*, epinephrine, norepinephrine, dopamine, histamine, noradrenaline, serotonin), acetylcholine, peptides (*e.g.*, angiotensin, calcitonin, chemokines, corticotropin releasing factor, galanin, growth hormone releasing hormone, gastric inhibitory peptide, glucagon, neuropeptide Y, neurotensin, opioids, thrombin, secretin, somatostatin, thyrotropin releasing hormone, vasopressin, vasoactive intestinal peptide), lipids and lipid-based compounds (*e.g.*, cannabinoids, platelet activating factor), excitatory and inhibitory amino acids (*e.g.*, glutamate, GABA), ions (*e.g.*, calcium), and toxins.

[10] In general, a GPCR binds only one type of signaling molecule and GPCRs are classified according to subfamilies based upon their selectivity and specificity for a particular ligand. When the ligand for a receptor is not known, the receptor is known as an orphan receptor. The extracellular domain interacts with or binds to certain signaling molecules or ligands located outside of the cell. The binding of a ligand to the extracellular domain alters the conformation of the receptor's intracellular domain causing the activation of a G protein. The G protein then activates or inactivates a separate plasma-membrane-bound enzyme or ion channel. This chain of events alters the concentration of one or more intracellular messengers (second messengers) such as cyclic AMP (cAMP), inositol triphosphate, diacylglycerol, or Ca^{2+} . These, in turn, alter the activity of other intracellular proteins such as cAMP-dependent protein kinase and Ca^{2+} /calmodulin-dependent protein kinases, leading to the transduction and amplification of the original extracellular signal. Baldwin, J.M., *Curr. Opin. Cell Biol.* 6:180-190 (1994). The G protein is deactivated by hydrolysis of GTP by GTPase. U.S. Patent Nos. 5,994,097 and 6,063,596.

[11] GPCR mutations, both of the loss-of-function and of the activating variety, have been associated with numerous human diseases, Coughlin, *supra*. For example, retinitis pigmentosa may arise from either loss-of-function or activating mutations in the rhodopsin gene. Somatic activating mutations in the thyrotropin receptor cause hyperfunctioning thyroid adenomas, Parma, J. et al., *Nature* 365:649-651 (1993). Parma et al. indicate that it may be possible that certain G protein-coupled receptors susceptible to constitutive activation may behave as proto-oncogenes. Interestingly, GPCRs have functional homologues in human cytomegalovirus and herpesvirus, so GPCRs may have been acquired during evolution for viral pathogenesis, Strader et al., *FASEB J.*, 9:745-754 (1995); Arvanitakis et al., *Nature*, 385:347-350 (1997); Murphy, *Annu. Rev. Immunol.* 12:593-633 (1994). The

importance of the GPCR superfamily is further highlighted by the recent discoveries that some of its family members, the chemokine receptors CXCR4/Fusin and CCR5, are co-receptors for T cell-tropic and macrophage-tropic HIV virus strains, respectively, Alkhatib et al., Science, 272:1955 (1996); Choe et al., Cell, 85:1135 (1996); Deng et al., Nature, 381:661
5 (1996); Doranz et al., Cell, 85:1149 (1996); Dragic et al., Nature, 381:667 (1996); Feng et al., Science, 272:872 (1996). It is conceivable that blocking these receptors may prevent infection by the human immunodeficiency (HIV) virus. Other GPCR-related items include regulating cellular metabolism and diagnosing, treating and preventing particular diseases associated with particular GPCRs.

10 [12] One important way to evaluate GPCRs and antibodies for GPCRs as novel drug targets and for other purposes such as diagnostics is through the creation and use of databases. Such databases can provide large amounts of information about genes, proteins, and other biological matter. An excellent example of such a database is the GPCR database created and maintained by LifeSpan BioSciences, Inc., Seattle, Washington, USA, which
15 database is available by subscription to researchers and others needing such information. The information in the databases can, for example, be searched, compared, and analyzed. The compilation of such databases, as well as the searching, comparing, etc., of the databases, can be referred to as the field of "bioinformatics." Investigations largely related to genes, such as the information found from the sequencing of the human genome, can be called "genomics"
20 while similar activities on proteins can be called "proteomics."

[13] There has gone unmet a need for improved systems, compositions, methods, and the like relating to improved antigenicity of peptides from GPCRs and antibodies relating thereto. The present invention provides these and other advantages.

SUMMARY

25 [14] The present invention provides antigenic peptides for GPCRs and antibodies relating thereto, and related systems, methods, compositions, and the like, such as diagnostics and medicaments. Where antibodies against a given GPCR are not known, the present invention provides such antibodies, and preferred antigenic sequences for producing such antibodies. Where antibodies against a given GPCR are known, the present invention
30 provides preferred antigenic peptides for producing antibodies that exhibit improved specificity, affinity or capacity to perform antibody-related actions relative to the known

antibodies. The present invention also provides improved methods of selecting antigenic peptides from any desired protein or polypeptide, as well as antigenic peptides so produced and antibodies against such antigenic peptides.

[15] The antigenic peptides and antibodies herein can be used, for example, to detect the presence or absence of corresponding GPCRs. They can be used to diagnose a variety of diseases and disorders in which GPCRs are involved, such as, *e.g.*, immune-related diseases, cell growth-related diseases, cell regeneration-related diseases, immunological-related cell proliferative diseases, and autoimmune diseases. Examples of specific diseases include AIDS, allergies, Alzheimer's disease, amyotrophic lateral sclerosis, atherosclerosis, bacterial, fungal, protozoan and viral infections, benign prostatic hypertrophy, bone diseases (*e.g.*, osteoarthritis, osteoporosis), carcinoma (*e.g.*, basal cell carcinoma, breast carcinoma, embryonal carcinoma, ovarian carcinoma, renal cell carcinoma, lung adenocarcinoma, lung small cell carcinoma, pancreatic carcinoma, prostate carcinoma, transitional carcinoma of the bladder, squamous cell carcinoma, thyroid carcinoma), cardiomyopathy, chronic and acute inflammation, circadian rhythm disorders, COPD, Crohn's disease, diabetes, Duchenne muscular dystrophy, embryonal carcinoma, endotoxic shock, environmental stress (*e.g.*, by heat, UV or chemicals), gastrointestinal disorders, glioblastoma multiform, graft vs. host disease, Hodgkin's disease, inflammatory bowel disease, ischemia, stroke, lymphoma, macular degeneration, malignant cytokine production, malignant fibrous histiocytoma, melanoma, meningioma, mesothelioma, multiple sclerosis, nasal congestion, pain, Parkinson's disease, prostate carcinoma, psoriasis, rhabdomyosarcoma, psychotic or neurological disorders (*e.g.*, anxiety, depression, schizophrenia, dementia, mental retardation, memory loss, epilepsy, locomotor problems, respiratory disorders, asthma, eating/body weight disorders including obesity, bulimia, diabetes, anorexia, nausea, hypertension, hypotension), renal disorders, reperfusion injury, rheumatoid arthritis, sarcoma (*e.g.*, chondrosarcoma, Ewing's sarcoma, osteosarcoma), septicemia, seminoma, sexual/reproductive disorders, tonsil, transitional carcinoma of the bladder, transplant rejection, trauma, tuberculosis, ulcers, ulcerative colitis, urinary retention, vascular and cardiovascular disorders, or any other disease or disorder in which G protein-coupled receptors are involved, as well as learning and/or memory disorders, diabetes, pain perception disorders, anorexia, obesity, hormonal release problems, or any other disease or disorder in which a specific GPCR is involved.

[16] The association of particular GPCRs with particular diseases, disorders or conditions will be apparent to a person of ordinary skill in the art in view of the present application, and thus the association with the antibodies of the present invention to the corresponding diseases, disorders or conditions.

5 [17] Thus, in one aspect the present invention provides isolated antigenic peptides according to any one of SEQ ID NOS. 692-2292. The isolated antigenic peptides also comprise an amino acid sequences that are at least about 90% or 95% identical to such sequences, or be an analog of such sequences, or comprise a short antigenic amino acid sequence that is identical to at least 5 consecutive amino acids set forth in any one of such
10 sequences or contain no more than one conservative amino acid substitution over at least 7 consecutive amino acids set forth in any of such sequences. The present invention also provides antibodies, particularly isolated antibody having high specificity and high affinity or avidity for a particular GPCR or other target polypeptide or protein, generated using the antigenic peptides discussed herein.

15 [18] The present invention also provides isolated nucleic acid molecules encoding an antigenic peptide or antibody as described herein. The molecule can encode a naturally occurring human antigenic peptide. In some embodiments, the present invention provides processes for producing an isolated polynucleotide can comprise hybridizing a nucleotide encoding an antigenic peptide as discussed herein to DNA such as genomic DNA under
20 stringent or highly stringent conditions and isolating the polynucleotide detected with the nucleotide.

[19] The present invention also provides kits and assays, such as kits for the detection of antibodies against a particular GPCR or other target polypeptide in a sample comprising: a) an isolated antigenic peptide as discussed herein and derived from the particular GPCR, and
25 b) at least one of a reagent or a device for detecting the antibodies, or comprising: a) an isolated antibody as described herein, and b) at least one of a reagent or a device for detecting the antibody. The assays include detection of a particular GPCR in a sample, comprising: a) providing an isolated antigenic peptide, b) contacting the isolated antigenic peptide corresponding to the particular GPCR with the sample under conditions suitable and for a
30 time sufficient for the antigenic peptide to bind to one or more antibodies specific for the target protein present in the sample, to provide an antibody-bound target protein, and c) detecting the antibody-bound antigenic peptide, and therefrom determining whether the

sample contains the particular GPCR. The assays can further comprise the step of binding the isolated antigenic peptide or the antibody to a solid substrate, and the sample can be an unpurified sample, for example from a human being.

[20] The assay can be selected from the group consisting of a countercurrent immuno-electrophoresis (CIEP) assay, a radioimmunoassay, a radioimmunoprecipitation, an enzyme-linked immuno-sorbent assay (ELISA), a dot blot assay, an inhibition or competition assay, a sandwich assay, an immunostick (dip-stick) assays, a simultaneous assay, an immunochromatographic assay, an immunofiltration assay, a latex bead agglutination assay, an immunofluorescent assay, a biosensor assay, and a low-light detection assay.

10 [21] In other aspects, the present invention provides methods of identifying an amino acid sequence for an antigenic peptide from a candidate polypeptide sequence such as a polypeptide or protein wherein the antigenic peptide has a length of about 5 to about 100 amino acids, typically 6 amino acids to about 50 amino acids, and preferably 7 amino acids to about 20 amino acids. The methods comprise: a) searching the candidate polypeptide
15 sequence using a comparison window of the length, and b) selecting against amino acid sequences of the length and having at least 1 to 3 or 4 characteristics selected from the group consisting of 1) at least two consecutive prolines, 2) at least two consecutive serines, 3) at least two consecutive lysines, 4) at least two consecutive arginines, 5) at least two consecutive aspartic acids, 6) at least two consecutive glutamic acids, 7) methionine, 8)
20 tryptophan, and 9) at least five consecutive amino acids comprising no charged amino acids. Preferably, the method comprises selecting against at least 5 to all of the characteristics.

[22] The methods can comprise, independently or in addition, selecting against amino acid sequences of the desired length having at least one of the following characteristics 1) sequences having at least 5 consecutive amino acids that are identical to an alternative amino
25 acid sequence from an alternative polypeptide that can be different from the candidate polypeptide, 2) posttranslational modification sites, and 3) highly hydrophobic sequences. The posttranslational modification sites can be phosphorylation or glycosylation sites. The methods can also comprise performing a BLAST-type or a FAST-type analyses for the candidate polypeptide sequence.

30 [23] These and other aspects, features, and embodiments are set forth within this application, including the following Detailed Description and attached drawings. The present invention comprises a variety of aspects, features, and embodiments; such multiple aspects,

features, and embodiments can be combined and permuted in any desired manner. In addition, various references are set forth herein, including in the Cross-Reference To Related Applications, that discuss certain compositions, apparatus, methods, or other information; all such references are incorporated herein by reference in their entirety and for all their teachings and disclosures, regardless of where the references may appear in this application.

BRIEF DESCRIPTION OF THE DRAWING

[24] Figure 1 depicts representative examples of the nucleotide and amino acid sequences of the GPCRs for which antigenic peptides are set forth herein, SEQ ID NOS. 1 - 691.

10 [25] Figure 2 depicts amino acid sequences for the antigenic peptides for the GPCRs herein, SEQ ID NOS. 692-2292.

[26] Figure 3 depicts a listing of GPCRS for which commercially available antibodies are putatively available.

DETAILED DESCRIPTION

15 A. INTRODUCTION AND OVERVIEW

[27] Diseases such as immune-related diseases, cell growth-related diseases, cell regeneration-related diseases, immunological-related cell proliferative diseases, and autoimmune diseases are serious health problems in the modern world. Any improvement in the diagnosis, treatment or other remediation of such diseases is a significant advance for millions of people. The present invention provides methods of identifying and selecting desirable antigenic peptides for GPCRs and other desired target or candidate proteins and polypeptides. The present invention also provides the antigenic peptides themselves, as well as antibodies against the antigenic peptides (and against proteins or polypeptides containing such antigenic peptides), and related diagnostics, antibody-based therapeutics directed to certain diseases and conditions, and other helpful compositions, systems, kits, assays and the like. The compositions, methods, and the like can be useful, for example, as agonists, antagonists, probes, and otherwise as may be desired.

25 [28] The antigenic peptides have been carefully selected using specific selection criteria and methodologies set forth herein to take advantage of particularly advantageous regions of the GPCRs from which they have been derived to provide unusually specific and

30

immunogenic antigens. These antigenic peptides are particularly useful for producing highly specific antibodies against the antigenic peptides, which, in turn, also means antibodies that are highly specific for the corresponding GPCRs containing the antigenic peptides. Accordingly, the antigenic peptides of the present invention, and the antibodies produced therefrom, are particularly useful for high specificity, low noise diagnostics and, in the case of the antibodies, for certain antibody-based therapeutics, as well as methods, kits, systems, and the like incorporating or based on such antigenic peptides or antibodies.

[29] The antibodies produced using the antigenic peptides of the present invention, for example, have a specificity for the corresponding GPCR such that the antibodies can selectively detect the corresponding GPCR in a sample containing non-desired or contaminating proteins or polypeptides, such as a tissue or blood sample. Preferably, the antibodies have a high specificity such that no significant amounts of such proteins or polypeptides are detected, and further preferably have a specificity such that only insubstantial to essentially zero amounts of non-desirable proteins are detected.

[30] The antibodies produced using the antigenic peptides of the present invention, for example, typically have an affinity or avidity constant (K_a) of at least about 10^7 liters/mole, typically a high affinity or avidity at least about 10^9 liters/mole, preferably at least about 10^{10} liters/mole, and further preferably at least about 10^{11} liters/mole.

[31] Figure 1 sets forth the DNA and protein sequences for the GPCRs from which the antigenic peptides of the present invention were derived SEQ ID NOS. 1-691. Figure 2 sets forth the amino acid sequences of exemplary antigenic peptides, SEQ ID NOS. 692-2292. The sequences in Figures 1 and 2 are listed according to SEQ ID NO and LSID, which is an identification number assigned to the given sequence in the LifeSpan Biosciences databases. The sequences in Figure 2 also include an identifier LPID, which is also an identification number assigned to the given sequence in the LifeSpan Biosciences databases. Figure 3 depicts GPCRs for which it has been reported that antibodies are commercially available, SEQ ID NOS. 1, 3, 5, 11, 13, 15, 21, 23, 25, 27, 29, 31, 35, 37, 39, 41, 43, 45, 49, 51, 53, 57, 59, 61, 63, 65, 67, 69, 70, 71, 73, 75, 77, 79, 83, 85, 97, 99, 101, 103, 105, 107, 113, 115, 117, 121, 125, 135, 139, 143, 145, 147, 151, 155, 157, 159, 161, 169, 171, 173, 175, 177, 183, 185, 187, 189, 191, 192, 194, 200, 202, 206, 208, 214, 216, 218, 228, 236, 238, 240, 248, 250, 264, 295, 299, 301, 305, 311, 313, 315, 317, 319, 321, 323, 325, 327, 329, 331, 333, 335, 337, 347, 349, 351, 361, 365, 367, 369, 371, 377, 379, 385, 387, 389, 391, 397,

423, 435, 439, 457, 459, 461, 462, 468, 470, 472, 503, 507, 515, 535, 537, 546, 548, 552, 562, 628, 636; Applicants do not represent that any of the antibodies in Figure 3 that such antibodies are actually commercially available nor that they have any significant specificity nor affinity for the GPCRs reported. For GPCRs for which no antigens or antibodies were previously known, the present invention provides valuable antigenic peptides and antibodies (see, e.g., SEQ ID NOS. 704-712, 731-743, 774-777, 803-806, 821-824, 876-879, 890-916, 942-949, 965-970, 985-988, 994-1009, 1014-1020, 1025-1028, 1044-1048, 1053-1056, 1073-1086, 1114-1123, 1152-1160, 1173-1178, 1188-1197, 1210-1227, 1232-1244, 1258-1270, 1280-1303, 1309-1368, 1373-1377, 1386-1389, 1394-1402, 1462-1482, 1496-1525, 1542-1549, 1557-1563, 1583-1649, 1656-1679, 1684-1688, 1693-1732, 1744-1752, 1765-1839, 1846-1854, 1855-1866, 1871-1917, 1926-1941, 1952-1955, 1960-1980, 1985-2141, 2152-2165, and 2170-2292.); for GPCRs for which antigens or antibodies are known, the present invention provides improved antigens in the form of antigenic peptides and improved antibodies (see, e.g., SEQ ID NOS. 692-703, 713-730, 744-802, 807-820, 825-875, 880-889, 917-941, 950-964, 971-984, 989-993, 1010-1013, 1021-1024, 1029-1043, 1049-1052, 1057-1072, 1087-1113, 1124-1151, 1161-1172, 1179-1187, 1198-1209, 1228-1231, 1245-1257, 1271-1279, 1304-1308, 1369-1372, which are antigenic peptides derived from GPCRs for which antibodies are reportedly commercially available). The antigenic peptides and antibodies, and uses and assays, etc., related to the antigenic peptides, are discussed further below.

[32] The discussion herein, including the following passages, has been separated by headings for convenience. The disclosure under a given heading is not restricted to that heading. For example, the discussion in the definitions section is a part of the disclosure of the invention, the discussion on antigenic peptides also contains discussion related to probes and diagnostics, and the discussion on antibodies contains discussion related to therapeutic compositions, etc.

B. DEFINITIONS

[33] The following paragraphs provide a non-exhaustive list of definitions of some of the terms and phrases as used herein. All terms used herein, including those specifically described below in this section, are used in accordance with their ordinary meanings unless the context or definition indicates otherwise. Also unless indicated otherwise, except within

the claims, the use of "or" includes "and" and vice-versa. Non-limiting terms are not to be construed as limiting unless expressly stated (for example, "including" means "including without limitation" unless expressly stated otherwise).

[34] The terms set forth in this application are not to be interpreted in the claims as indicating a "means plus function" relationship unless the word "means" is specifically recited in a claim, and are to be interpreted in the claims as indicating a "means plus function" relationship where the word "means" is specifically recited in a claim. Similarly, the terms set forth in this application are not to be interpreted in method or process claims as indicating a "step plus function" relationship unless the word "step" is specifically recited in the claims, and are to be interpreted in the claims as indicating a "step plus function" relationship where the word "step" is specifically recited in a claim.

[35] "Agonist" indicates a substance, such as a molecule or compound, that interacts with a particular GPCR, for example by binding to the GPCR, to activate, increase, or prolong the amount or the duration of the effect of the biological activity or functionality of the GPCR. Agonists include proteins, nucleic acids, carbohydrates, or any other molecules that bind to and positively modulate the effect of the GPCR. Agonists and other modulators of the particular GPCR can be identified using *in vitro* or *in vivo* assays for G protein-coupled receptor expression or G protein-mediated signaling. For example, assays for agonists and other modulators include expressing a particular GPCR in cells or cell membranes, applying putative modulator compounds in the presence or absence of a specific known or putative ligand and then determining the functional effects on the particular GPCR-mediated signaling. Samples or assays comprising a particular GPCR that are treated with a potential agonist or other modulator are compared to control samples without the agonist or other modulator to examine the extent of modulation. Control samples can be assigned a relative activity value for the particular GPCR of 100%. Agonist activity on a particular GPCR is achieved when the G protein-coupled receptor activity value relative to the control is at least about 110%, optionally about 150%, preferably about 200-500%, or about 1000-3000% or higher. Down-modulation (for example by an antagonist) of a particular GPCR is achieved when the particular GPCR activity value relative to the control is at most about 90%, typically about 80%, optionally about 50% or about 25-0% of the 100% value.

[36] "Aggregate," see Complex.

[37] "Algorithm" refers to a detailed sequence of actions to perform to accomplish some task. In computer programming, refers to instructions given to the computer.

[38] "Allele" or "allelic sequence" indicates an alternative form of the gene encoding the GPCR. Alleles may result from at least one mutation in the nucleic acid sequence and may
5 result in altered mRNAs or in polypeptides whose structure or function may or may not be altered. Any given natural or recombinant gene may have none, one, or many allelic forms. Common mutational changes that give rise to alleles are generally ascribed to natural deletions, additions, or substitutions of nucleotides. Each of these types of changes may occur alone or in combination with the others, one or more times in a given sequence.

10 [39] "Altered" nucleic acid sequences encoding the GPCR include those sequences with deletions, insertions, or substitutions of different nucleotides, resulting in a polynucleotide encoding the same GPCR or a polypeptide variant with at least one substantial structural or functional characteristic of the GPCR. Included within this definition are polymorphisms that may or may not be readily detectable using a particular oligonucleotide probe against the
15 polynucleotide encoding the GPCR. "Altered" proteins may contain deletions, insertions, or substitutions of amino acid residues that produce a silent change and result in a functionally equivalent GPCR. Deliberate amino acid substitutions may be made on the basis of similarity in polarity, charge, solubility, hydrophobicity, hydrophilicity, or the amphipathic nature of the residues, as long as the biological or immunological activity of the GPCR is
20 retained. For example, negatively charged amino acids may include aspartic acid and glutamic acid, positively charged amino acids may include lysine and arginine, and amino acids with uncharged polar head groups having similar hydrophilicity values may include leucine, isoleucine, and valine; glycine and alanine; asparagine and glutamine; serine and threonine; and phenylalanine and tyrosine.

25 [40] "Alternative splicing" refers to different ways of cutting and assembling exons to produce mature mRNAs.

[41] "Amino acid" refers generally to any of a class of organic compounds that contains at least one amino group, $-NH_2$, and one carboxyl group, $-COOH$. The alpha-amino acids, $RCH(NH_2)COOH$, are the building blocks from which proteins are typically constructed.
30 Amino acid can also refer to artificial chemical analogues or mimetics of a given amino acid as described, depending on the context.

[42] "Amino acid sequence" refers to a string of amino acids, such as an oligopeptide, peptide, polypeptide, or protein sequence, or a fragment of any of these, including naturally occurring or synthetic molecules and those comprising an artificial chemical analogue or mimetic of a given amino acid. In this context, "biologically active fragments," "biologically functional fragments," "immunogenic fragments," and "antigenic fragments" refer to fragments of the GPCR that are preferably about 15, 25, or 50 or more amino acids in length and that retain a substantial amount of such activity of the GPCR. Where "amino acid sequence" refers to an amino acid sequence of a naturally occurring protein molecule, "amino acid sequence" and like terms are not necessarily limited to the complete native amino acid sequence associated with the recited protein molecule.

[43] "Amplification" indicates the production of additional copies of something, such as a nucleic acid sequence. Amplification can be generally carried out using polymerase chain reaction (PCR) technologies or other technologies such as the cycling probe reaction (CPR) that are well known in the art. *See, e.g.,* Dieffenbach, C. W. and G. S. Dveksler, PCR Primer, a Laboratory Manual, pp.1-5, Cold Spring Harbor Press, Plainview, N.Y. (1995); U.S. Patents Nos. 5,660,988, 5,731,146 and 6,136,533.

[44] "Amplification primers" are oligonucleotides such as natural, analog or artificially created nucleotides that can serve as the basis for the amplification of a selected nucleic acid sequence. They include, for example, both PCR primers and ligase chain reaction oligonucleotides.

[45] "Analog" or "variant" indicates a GPCR or antigenic peptide that has been modified by deletion, addition, modification, or substitution of one or more amino acid residues compared to the wild-type sequence. Analogs encompass allelic and polymorphic variants, and also muteins and fusion proteins that comprise all or a significant part of such GPCR, *e.g.,* covalently linked via side-chain group or terminal residue to a different protein, polypeptide, or moiety (fusion partner). Variants of a particular GPCR protein refer to an amino acid sequence that is altered by one or more amino acids, for example by one or more amino acid substitution, insertion, deletion or modification, or proteins with or without associated native-pattern glycosylation. The variant may have "conservative" changes. Such "conservative" changes generally are well known in the art and readily determinable for a particular GPCR in view of the present application. Conservative changes include, for example, substitutions where a substituted amino acid has similar structural or chemical

properties to the amino acid it replaced (e.g., negatively charged amino acids include aspartic acid and glutamic acid; positively charged amino acids include lysine, arginine, histidine, asparagine, and glutamine; amino acids containing sulfur include methionine and cysteine; polar hydroxy amino acids include serine, threonine, and tyrosine; large hydrophobic amino acids include phenylalanine and tryptophan; small hydrophobic amino acids include alanine, leucine, isoleucine, and valine). A variant may also have "nonconservative" changes which means that the replacement amino acid provides some substantial change in the amino sequence.

[46] A variant preferably retains at least about 90% identity, and more preferably at least about 95% identity. Within certain embodiments, such variants contain alterations such that the ability of the variant to induce an immunogenic response is not substantially eliminated; in some embodiments the ability to an immunogenic response is not substantially diminished. Modifications of amino acid residues may include but are not limited to aliphatic esters or amides of the carboxyl terminus or of residues containing carboxyl side chains, O-acyl derivatives of hydroxyl group-containing residues, and N-acyl derivatives of the amino-terminal amino acid or amino-group containing residues, e.g., lysine or arginine. Guidance in determining which and how many amino acid residues may be substituted, inserted, deleted or modified without diminishing immunological or biological activity may be found in view of the present application using any of a variety of methods and computer programs known in the art, for example, DNASTAR software. Properties of a variant may generally be evaluated by assaying the reactivity of the variant with, for example, antibodies as described herein or evaluating a biological activity characteristic of the native protein as described herein or as known in the art in view of the present application. Certain polynucleotide variants are capable of hybridizing under appropriately stringent conditions to a naturally occurring DNA sequence encoding a particular GPCR protein (or a complementary sequence). Such hybridizing nucleic acid sequences are also within the scope of this invention.

[47] "Antagonist" refers to a molecule which interacts with a particular GPCR, for example by binding to the particular GPCR, and prevents, inactivates, decreases or shortens the amount or the duration of the effect of the biological activity of the GPCR. Antagonists include proteins, nucleic acids, carbohydrates, antibodies, or any other molecules that so affect the GPCR. Antagonists can be identified, for example, using appropriate screens

corresponding to those described for agonists above and elsewhere herein or as would be apparent to those skilled in the art in view of the present application.

[48] "Antibody" indicates one type of binding partner, typically encoded by an immunoglobulin gene or immunoglobulin genes, and refers to, for example, intact
5 monoclonal antibodies (including agonist and antagonist antibodies), polyclonal antibodies, phage display antibodies, and multispecific antibodies (e.g., bispecific antibodies) formed, for example, from at least two intact antibodies. Antibody also refers to fragments thereof, which comprise a portion of an intact antibody, generally the antigen-binding or variable region of the intact antibody that are capable of binding the epitopic determinant. Examples
10 of antibody fragments include Fab, Fab', F(ab')₂, and Fv fragments, diabodies, linear antibodies, single-chain antibody molecules, and multispecific antibodies formed from antibody fragments. See US Patent No. 6,214,984. Antibody fragments may be synthesized by digestion of an intact antibody or synthesized de novo either chemically or utilizing recombinant DNA technology. Antibodies according to the present invention have at least
15 one of adequate specificity, affinity and capacity to perform the activities desired for the antibodies. Antibodies can, for example, be monoclonal, polyclonal, or combinatorial. Antibodies that bind GPCR polypeptides can be prepared using intact polypeptides or using fragments containing small peptides of interest as the immunizing antigen. The polypeptide or oligopeptide used to immunize an animal (e.g., a mouse, a rat, or a rabbit) can be derived
20 from the translation of RNA, or synthesized chemically, and can be conjugated to a carrier protein if desired. Commonly used carriers that are chemically coupled to peptides include bovine serum albumin, thyroglobulin, and keyhole limpet hemocyanin (KLH). The coupled peptide is then used to immunize the animal.

[49] "Antigenic determinant" refers to the antigen recognition site on an antigen (*i.e.*,
25 epitope). Such antigenic determinant may also be immunogenic.

[50] "Antisense" refers to any composition containing a nucleic acid sequence that is complementary to a specific nucleic acid sequence. "Antisense strand" refers to a nucleic acid strand that is complementary to the "sense" strand. Antisense molecules may be produced by any method including transcription or synthesis including synthesis by ligating
30 the gene(s) of interest in a reverse orientation to a desired promoter that permits the synthesis of a complementary strand. Once introduced into a cell, the complementary nucleotides can combine with natural sequences produced by the cell to form duplexes and to block either

transcription or translation. The designation "negative" can refer to the antisense strand, and the designation "positive" can refer to the sense strand.

- 5 [51] **"Biologically active"** or **"biologically functional,"** when referring to an antigenic peptide, indicates that the antigenic peptide induces an immunogenic response specific for the antigenic peptide and thus for the GPCR from which it was obtained. A variant, fragment, etc., of an antigenic peptide is "biologically active" or "biologically functional" if the ability to induce the specific immunogenic response is not substantially diminished. The term "not substantially diminished" means retaining a functionality that is at least about 90% of the functionality of the native antigenic peptide. Appropriate assays designed to evaluate such
- 10 functionality may be designed based on existing assays known in the art in view of the present application, or on the representative assays provided herein.
- [52] **"Annotation"** refers to the provision of helpful or identifying information about a GPCR or other open reading frame (ORF), such as locus name, key words, and Medline references.
- 15 [53] **"BLAST"** refers to the Basic Local Alignment Search Tool, which is a technique for detecting ungapped sub-sequences that match a given query sequence. BLAST can be used as a preliminary step for detecting ORF boundaries.
- [54] **"BLASTP"** refers to a BLAST program that compares an amino acid query sequence against a protein sequence database.
- 20 [55] **"BLASTX"** refers to a BLAST program that compares the six-frame conceptual translation products of a nucleotide query sequence (both strands) against a protein sequence database. BLASTX can be used to create a sub-database of ORFs which may exist on a contig, and to identify the best match between one of these ORFs and a sequence in an external database.
- 25 [56] **"Buffer"** refers to a component in a solution to provide a buffered solution that resists changes in pH by the action of its acid-base conjugate components.
- [57] **"CDS"** refers to the GenBank DNA sequence entry for coding sequence. A coding sequence is a sub-sequence of a DNA sequence that is surmised to encode a gene. A complete gene coding sequence begins with an "ATG" and ends with a stop codon.
- 30 [58] **"Clone"** in molecular biology refers to a vector carrying an insert DNA sequence.
- [59] **"Cloning"** in molecular biology refers to a recombinant DNA technique used to produce multiple, up to millions or more, copies of a DNA sequence. The DNA sequence is

inserted into a small carrier or vector (*e.g.*, plasmid, bacteriophage, or virus) and inserted into a host cell for amplification or expression.

[60] "Cluster" refers to a group of ORFs related to one another by sequence homology. Clusters are generally determined by a specified degree of homology and overlap (*e.g.*, a stringency).

[61] "Comparison window" indicates a segment of any one of the number of contiguous positions selected from the group consisting of from 20 to 600, usually about 50 to about 200, more usually about 100 to about 150 in which a sequence may be compared to a reference sequence of the same number of contiguous positions after the two sequences are aligned to enhance sequence similarity. Methods of alignment of sequences for comparison will be readily apparent to a person of ordinary skill in the art in view of the present application.

[62] "Complementary" or "complementarity" refers to the natural binding of polynucleotides by base pairing. For example, the sequence "A-G-T" binds to the complementary sequence "T-C-A." Complementarity between two single-stranded molecules may be "partial," such that only some of the nucleic acids bind, or it may be "complete," such that all of the nucleotides of at least one of the single-stranded molecules binds to corresponding nucleotides of the other single-stranded molecule. The degree of complementarity between nucleic acid strands has significant effects on the efficiency and strength of the hybridization between the nucleic acid strands. This can be of particular importance in amplification reactions, which can depend upon binding between nucleic acids strands, and in the design and use of peptide nucleic acid (PNA) molecules.

[63] "Complex," or "aggregate," indicates a dimer or multimer formed between at least two proteins or other macromolecules, for example a GPCR and its ligand.

[64] "Composition" indicates a combination of multiple substances into a mixture.

[65] "Composition comprising a given amino acid sequence" refers broadly to any composition containing the given amino acid sequence. The composition may comprise a dry formulation, an aqueous solution, or a sterile composition.

[66] "Consensus sequence" refers to the sequence that reflects the most common choice of base or amino acid at each position from a series of related DNA, RNA, or protein sequences. Areas of particularly good agreement often represent conserved functional domains. The generation of consensus sequences has typically been subjected to intensive mathematical analysis.

- [67] "Conservative changes" to an amino acid sequence, see Analog.
- [68] "Deletion" refers to a change in the amino acid or nucleotide sequence that results in the absence of one or more amino acid residues or nucleotides.
- [69] "Derivative" refers to chemical modification of an antigenic peptide, or of an antibody specific for and created from the antigenic peptide. A derivative peptide can be modified, for example, by glycosylation or pegylation.
- [70] "Diabodies" refers to one type of antibody comprising small antibody fragments with two antigen-binding sites, which fragments comprise a heavy-chain variable domain (V_H) connected to a light-chain variable domain (V_L) on the same polypeptide chain (V_H - V_L). By using a linker that is too short to allow pairing between the two domains on the same chain, the domains pair with the complementary domains of another chain and create two antigen-binding sites. Diabodies are described, for example, in EP 404,097; WO 93/11161; and Holliger et al., Proc. Natl. Acad. Sci. USA, 90:6444-6448 (1993).
- [71] "Database" refers to a structured format for organizing and maintaining information or data, a collection of data records, in a computer-readable form that can be rapidly and easily retrieved. A database is typically stored in a computer-readable memory. Records may comprise web pages, graphics, audio files, text files, or links. Records may or may not be further broken into fields. Database records are usually indexed and come with a search interface to find records of interest.
- [72] "E-value" refers to a result of a FASTA analysis. The number indicates the probability that a match between two sequences is due to random chance.
- [73] "Expression vector" is a specialized vector constructed so that the gene inserted in the vector can be expressed in the cytoplasm of a host cell.
- [74] "FASTA" refers to a modular set of sequence comparison programs used to compare an amino acid or DNA sequence against all entries in a sequence database. FASTA was written by Professor William Pearson of the University of Virginia Department of Biochemistry. The program uses the rapid sequence algorithm described by Lipman and Pearson (1988) and the Smith-Waterman sequence alignment protocol. FASTA performs a protein to protein comparison.
- [75] "FASTX" refers to a module of the FASTA protocol used to define optimal ORF boundaries while searching for genes. FASTX uses a nucleotide to protein sequence comparison.

[76] "Fragment," see Portion.

[77] "GenBank" refers to a family of public databases comprising nucleic acid and amino acid sequence information, including the GenPept bacterial peptide database.

[78] "Gene" refers to the basic unit of heredity that carries the genetic information for a given RNA or protein molecule. A gene is composed of a contiguous stretch of DNA and contains a coding region that is flanked on each end by regions that are transcribed but not translated. A gene is a segment of DNA involved in producing a biologically active or biologically functional polypeptide chain.

[79] "Heterologous" indicates a nucleic acid that comprises two or more subsequences that are not found in the same relationship to each other in nature. For instance, the nucleic acid is typically recombinantly produced, having two or more sequences from unrelated genes arranged to make a new functional nucleic acid, e.g., a promoter from one source and a coding region from another source. Similarly, a heterologous protein indicates that the protein comprises two or more subsequences that are not found in the same relationship to each other in nature (e.g., a fusion protein).

[80] "Hit Threshold" refers to a pre-set E-value or P-value for evaluating sequence matches. For example, this value can be set at $1e-6$ for finding genes; and at $1e-15$ for clustering genes.

[81] "Homology" refers to a degree of complementarity. There may be partial homology or complete homology. The word "identity" may substitute for the word "homology." A partially complementary sequence that at least partially, and substantially, inhibits a corresponding sequence from hybridizing to a target nucleic acid is referred to as "substantially homologous." The inhibition of hybridization of the completely complementary sequence to the target sequence may be examined using a hybridization assay (e.g., Southern or Northern blot, *in situ* hybridization, solution hybridization) under conditions of reduced stringency. A substantially homologous sequence or hybridization probe will compete for and inhibit the binding of a completely homologous sequence to the target sequence under stringency conditions that inhibit non-specific binding but permit specific binding. The absence of non-specific binding may be tested by the use of a second target sequence which lacks even a partial degree of complementarity (e.g., less than about 30% homology or identity). In the absence of non-specific binding, the substantially

homologous sequence or probe will not hybridize to the second, non-complementary target sequence.

[82] **"Humanized antibody"** refers to antibody molecules in which the amino acid sequence in the non-antigen-binding regions has been altered so that the antibody more closely resembles a human antibody, and still retains its original binding ability. Typically, humanized antibodies are human immunoglobulins (recipient antibody) in which residues from a complementarity-determining region (CDR) of the recipient are replaced by residues from a CDR of a non-human species (donor antibody) such as mouse, rat or rabbit having the desired specificity, affinity, and capacity. In some instances, Fv framework residues of the human immunoglobulin are replaced by corresponding non-human residues. Furthermore, humanized antibodies may comprise residues that are found neither in the recipient antibody nor in the imported CDR or framework sequences. These modifications are typically made to further refine and optimize antibody performance. In general, the humanized antibody will comprise substantially all of at least one, and typically two, variable domains, in which all or substantially all of the CDR regions correspond to those of a non-human immunoglobulin and all or substantially all of the framework (FR) regions are those of a human immunoglobulin sequence. The humanized antibody optimally also will comprise at least a portion of an immunoglobulin constant region (Fc), typically that of a human immunoglobulin. For further details see, *e.g.*, Jones et al., *Nature*, 321:522-525 (1986); Reichmann et al., *Nature*, 332:323-329 (1988); and, Presta, *Curr. Op. Struct. Biol.*, 2:593-596 (1992).

[83] **"Identity,"** see Homology.

[84] **"Immunocytochemistry"** refers to the use of immunologic methods, including a specific antibody, to study cell constituents.

[85] **"Immunohistochemistry"** refers to the use of immunologic methods, including a specific antibody, to study specific antigens in tissue slices.

[86] **"Immunolocalization"** refers to the use of immunologic methods, including a specific antibody, to locate molecules or structures within cells or tissues.

[87] **"Immunologically active"** refers to the capability of a natural, recombinant, or synthetic GPCR, or any immunogenic fragment thereof, to induce a specific immune response in appropriate animals or cells and to bind with specific antibodies. A polypeptide is "immunologically active" if it is recognized by (*e.g.*, specifically bound by) a B-cell or T-

cell surface antigen receptor. Immunological activity may generally be assessed using well known techniques, such as those summarized in Paul, Fundamental Immunology, 3rd ed., 243-247, Raven Press (1993) and references cited therein. Such techniques include screening polypeptides derived from the native polypeptide for the ability to react with antigen-specific antisera or T-cell lines or clones, which may be prepared in view of the present application using well known techniques. Preferably, an immunologically active portion of a GPCR protein reacts with such antisera or T-cells at a level that is not substantially lower than the reactivity of the full-length polypeptide (*e.g.*, in an ELISA or T-cell reactivity assay). Such screens may generally be performed using methods well known to those of ordinary skill in the art in view of the present application, such as those described in Harlow and Lane, Antibodies: A Laboratory Manual, Cold Spring Harbor Press (1988). B-cell and T-cell epitopes may also be predicted via computer analysis.

[88] "Immune response" refers to any of the body's immunologic reactions to an antigen such as antibody formation, cellular immunity, hypersensitivity, or immunological tolerance.

[89] "Insertion" and "addition" when referring to a change in a nucleotide or amino sequence indicate the addition of one or more nucleotides or amino acid residues, respectively, to the sequence.

[90] "*In situ* hybridization" refers to use of a nucleic acid probe, typically a DNA or RNA probe, to detect the presence of a DNA or RNA sequence in target cells such as cloned bacterial cells, cultured eukaryotic cells, or tissue samples. *In situ* hybridization can also be used for locating genes on chromosomes. The process can be performed by preparing a microscope slide with cells in metaphase of mitosis, then treating slide with a weak base to denature the DNA. Next, pour radioactively labeled probe onto the slide under hybridizing conditions, expose the slide to a photographic emulsion for a suitable period such as a few days or weeks, then develop the emulsion.

[91] "Isoform" refers to different forms of a protein that may be produced from different genes or from the same gene by alternative RNA splicing.

[92] "Isolated" generally means that the material is removed from its original environment (*e.g.*, the natural environment if it is naturally occurring).

[93] "Library" refers physically to a pool of nucleic acid fragments that has been propagated in a cloning vector. Library can also refer to an electronic collection of genomic

or proteomic sequence data, including raw sequences, contigs, ORFs and loci from a specific organism.

- [94] "Ligand" refers to an ion or molecule that binds with another molecule, such as a GPCR, to form a macromolecule such as a receptor-ligand complex. An "endogenous
5 ligand" refers to a native ligand that binds to the receptor of the GPCR and modulates biological activity or functionality of the GPCR in its native environment. A "specific ligand" is a ligand able to bind to a particular GPCR and modulate the biological activity or functionality of the particular GPCR; an endogenous ligand is one example of a specific ligand.
- 10 [95] "Microarray" refers to an array of distinct nucleic acid or amino acid molecules arrayed on a substrate, such as paper, nylon or any other type of membrane, filter, chip, glass slide, or any other suitable solid support. Microarrays can also refer to tissue microarrays, composed of small tissue pieces arranged on a slide. U.S. Pat. No. 5,143,854 and PCT Patent Publication Nos. WO 90/15070 and 92/10092.
- 15 [96] "Mimetic" refers to a molecule, *e.g.*, a peptide or non-peptide agent, such as a small molecule, that is able to perform the same biological activity as a certain biologically active agent. For example, some mimetics are molecules comprising the same biological function or activity as the particular GPCR. The structure of the mimetic can be developed from knowledge of the structure of the particular GPCR or portions thereof. For appropriate
20 mimetics, the mimetic is able to effect some or all of the actions of a given antigenic peptide or antibodies against the antigenic peptide. Such mimetics can be made, in view of the present application, using techniques well known in the art, *see, e.g.*, U.S. Patent Nos. 6,197,752; 6,093,697; 6,207,643; 5,849,323, and can be included in the various processes, methods, and systems, etc., described herein, such as databases, binding partner assays,
25 probes, medicaments, and therapeutics.
- [97] "Modulate" refers to controllably changing the activity of a substance or other item, such as the biological activity of a GPCR, antigenic peptide or corresponding antibody. For example, modulation may cause an increase or a decrease in protein activity, binding characteristics, or other biological, functional, or immunological properties of the GPCR.
- 30 [98] "Monoclonal antibody" refers to an antibody obtained from a population of substantially homogeneous antibodies, *e.g.*, the individual antibodies comprising the population are identical except for possible naturally occurring mutations that may be present

in minor amounts. Monoclonal antibodies include "chimeric" antibodies (immunoglobulins) in which a portion of the heavy or light chain is identical with or homologous to corresponding sequences in antibodies derived from a particular species or belonging to a particular antibody class or subclass, while the remainder of the chain(s) is identical with or homologous to corresponding sequences in antibodies derived from another species or belonging to another antibody class or subclass, as well as fragments of such antibodies, so long as they exhibit the desired biological activity. U.S. Pat. No. 4,816,567; Morrison et al., P.N.A.S. USA, 81:6851-6855 (1984). Monoclonal antibodies are highly specific, being directed against a single antigenic site. As a matter of distinction, polyclonal antibody preparations typically include different antibodies directed against different determinants (epitopes) of a target antigen whereas each monoclonal antibody is directed against a single determinant on the antigen. Monoclonal antibodies can be synthesized by hybridoma culture, uncontaminated by other immunoglobulins. For example, the monoclonal antibodies to be used in accordance with the present invention may be made by the hybridoma method first described by Kohler and Milstein, Nature, 256:495 (1975), or may be made by recombinant DNA methods. See, e.g., U.S. Pat. No. 4,816,567. Monoclonal antibodies may also be isolated from phage antibody libraries using the techniques described in Clackson et al., Nature, 352:624-628 (1991), and Marks et al., J. Mol. Biol., 222:581-597 (1991), for example. The modifier "monoclonal" indicates the character of the antibody as being obtained from a substantially homogeneous population of antibodies, and is not to be construed as requiring production of the antibody by any particular method.

[99] "Nonconservative" changes to an amino acid sequence, see Analog.

[100] "Northern blotting" or "Northern analysis" refers to a method used to detect specific RNA sequences. For example, the process can be performed by electrophoresing RNA in a denaturing agarose gel, transferring the gel onto a membrane, and hybridizing with a labeled RNA or DNA probe.

[101] "Nucleic acid sequence" refers to a polymer comprising a string of "nucleic acids" such as an oligonucleotide, or a polynucleotide or fragment thereof. The nucleic acid sequence can be from DNA or RNA of genomic or synthetic origin, may be single-stranded or double-stranded, and may represent the sense or the antisense strand. A nucleic acid sequence can also be a PNA or a DNA-like or RNA-like material. Unless stated otherwise,

the term encompasses nucleic acids containing known analogues or mimetics of natural nucleotides that have similar binding properties as the reference nucleic acid.

[102] **"Oligonucleotide"** refers to a nucleic acid sequence, generally between 6 nucleotides to 60 nucleotides, preferably about 15 to 30 nucleotides, and most preferably about 20 to 25 nucleotides, that can, for example, be used in PCR or other nucleic acid amplification or in a hybridization assay or microarray. **"Oligonucleotide"** includes **"amplimers," "primers," "oligomers,"** and **"probes,"** as these terms are commonly defined in the art. Oligonucleotides can be chemically synthesized. Such synthetic oligonucleotides may have no 5' phosphate and if so will not ligate to another oligonucleotide without adding a phosphate, typically by using an ATP in the presence of a kinase. A synthetic oligonucleotide will ligate to a fragment that has not been dephosphorylated.

[103] **"Operably linked"** or **"operably connected"** indicates that one element of an apparatus, system, or method, etc., is connected to another element of the apparatus, system, or method, etc., such that the two elements are able to perform their intended purposes. For example, when a promoter is linked to a polynucleotide to allow transcription of the polynucleotide, it is **"operably linked"** to the polynucleotide.

[104] **"Orphan receptor"** refers to a receptor for which the endogenous ligand or other ligands inducing biological activity are not known.

[105] **"PCR"** or **"polymerase chain reaction"** refers to an *in vitro* method that uses oligonucleotide primers, enzymes, and a series of repetitive temperature cycles to generate millions of copies of a nucleic acid, typically DNA, from an original specimen of a specific DNA sequence, which specimen may be present only in a trace amount.

[106] **"Plasmids"** refers to extrachromosomal genetic elements composed of DNA or RNA found in both eukaryotic and prokaryotic cells that can propagate themselves autonomously in cells. Plasmids can be used as carriers or vectors to clone DNA molecules. They are designated by a lower case p preceded or followed by capital letters or numbers. The starting plasmids herein are either commercially available, publicly available on an unrestricted basis, or can be constructed from available plasmids in accord with published procedures. In addition, equivalent plasmids to those described are known in the art and will be apparent to the ordinarily skilled artisan in view of the present application.

[107] **"Polynucleotide encoding a polypeptide"** indicates a polynucleotide that includes only the coding sequence for the polypeptide as well as polynucleotides that include additional coding or non-coding sequence.

5 [108] **"Portion" or "fragment"** with regard to a protein (as in "a portion of a given protein") refers to parts of that protein, a subsequence of the complete amino acid sequence of the receptor containing at least about 8, usually at least about 12, more typically at least about 20, and commonly at least about 30 or more contiguous amino acid residues, up to the entire amino acid sequence minus one amino acid. Thus, a protein "comprising at least a portion of the amino acid sequence of SEQ ID NO:XX" or a protein "comprising at least a portion of the
10 amino acid sequence of a particular GPCR" encompasses the full-length protein and fragments thereof. A portion or fragment of a nucleic acid refers to nucleic acid sequences that are greater than about 12 nucleotides in length, and typically at least about 60 or 100 nucleotides, generally at least about 1000 nucleotides, or at least about 10,000 nucleotides in length, up to the entire nucleic acid sequence minus one nucleic acid.

15 [109] **"P-value"** is a statistical term used to indicate the probability that an event is due to random chance. When used in reference to a result of BLAST searches, the number indicates the probability that a match between two sequences is due to random chance.

[110] **"Receptor"** refers to a molecular structure, typically within a cell or on a cell surface, that selectively binds a specific substance (a ligand) and a specific physiologic effect
20 that accompanies the binding. GPCRs are a type of cell-surface receptor, which means a protein in, on, or traversing the cell membrane (in the case of GPCRs, traversing the cell membrane) that recognizes and binds to specific molecules in the surrounding fluid. The binding to a receptor may serve to transport molecules into the cell's interior or to signal the cell to respond in some way.

25 [111] **"Recombinant"** refers to both a method of production and a structure. Some recombinant nucleic acids and proteins are made by the use of recombinant DNA techniques that involve human intervention, either in manipulation or selection. Others are made by fusing two fragments that are not naturally contiguous to each other. Engineered vectors are encompassed, as well as nucleic acids comprising sequences derived using any synthetic
30 oligonucleotide process.

[112] **"Sample"** is used in its usual broad sense. For example, a biological sample suspected of containing nucleic acids encoding the GPCR, or fragments thereof, or the GPCR

itself, may comprise a bodily fluid; an extract from a cell, chromosome, organelle, or membrane from a cell; a cell; genomic DNA, RNA, or cDNA (in solution or bound to a solid support); a tissue; a tissue print, and the like. Biological sample refers to samples from a healthy individual as well as to samples from a subject suspected of having or susceptible to having, *e.g.*, immune-related diseases, cell growth-related diseases, cell regeneration-related diseases, immunological-related cell proliferative diseases, and autoimmune diseases. Examples of specific diseases include AIDS, allergies, Alzheimer's disease, amyotrophic lateral sclerosis, atherosclerosis, bacterial, fungal, protozoan and viral infections, benign prostatic hypertrophy, bone diseases (*e.g.*, osteoarthritis, osteoporosis), carcinoma (*e.g.*, basal cell carcinoma, breast carcinoma, embryonal carcinoma, ovarian carcinoma, renal cell carcinoma, lung adenocarcinoma, lung small cell carcinoma, pancreatic carcinoma, prostate carcinoma, transitional carcinoma of the bladder, squamous cell carcinoma, thyroid carcinoma), cardiomyopathy, chronic and acute inflammation, circadian rhythm disorders, COPD, Crohn's disease, diabetes, Duchenne muscular dystrophy, embryonal carcinoma, endotoxic shock, environmental stress (*e.g.*, by heat, UV or chemicals), gastrointestinal disorders, glioblastoma multiform, graft vs. host disease, Hodgkin's disease, inflammatory bowel disease, ischemia, stroke, lymphoma, macular degeneration, malignant cytokine production, malignant fibrous histiocytoma, melanoma, meningioma, mesothelioma, multiple sclerosis, nasal congestion, pain, Parkinson's disease, prostate carcinoma, psoriasis, rhabdomyosarcoma, psychotic or neurological disorders (*e.g.*, anxiety, depression, schizophrenia, dementia, mental retardation, memory loss, epilepsy, locomotor problems, respiratory disorders, asthma, eating/body weight disorders including obesity, bulimia, diabetes, anorexia, nausea, hypertension, hypotension), renal disorders, reperfusion injury, rheumatoid arthritis, sarcoma (*e.g.*, chondrosarcoma, Ewing's sarcoma, osteosarcoma), septicemia, seminoma, sexual/reproductive disorders, tonsil, transitional carcinoma of the bladder, transplant rejection, trauma, tuberculosis, ulcers, ulcerative colitis, urinary retention, vascular and cardiovascular disorders, or any other disease or disorder in which G protein-coupled receptors are involved, as well as learning and/or memory disorders, diabetes, pain perception disorders, anorexia, obesity, hormonal release problems, or any other disease or disorder in which a specific GPCR is involved.

[113] "Second messengers" refer to intracellular signaling molecules such as cyclic AMP (cAMP), inositol triphosphate, diacylglycerol, or Ca^{2+} . Second messengers, in turn, alter the

activity of other intracellular proteins such as cAMP-dependent protein kinase and Ca^{2+} /calmodulin-dependent protein kinases, leading to the transduction and amplification of the original extracellular signal.

[114] "Southern blotting" refers to a method for detecting specific DNA sequences via hybridization. For example, a DNA sample can be electrophoresed in a denaturing agarose gel, transferred onto a membrane, and hybridized with a complementary nucleic acid probe. "Southern" when used in reference to a database indicates an electronic analog of the laboratory technique, which analysis can be used to identify libraries in which a given DNA sequence, such as a gene, EST, or ORF is present. The terms "Northern" and "Western" likewise can be used for electronic analogs to the respective laboratory techniques described above.

[115] "Specific binding" or "specifically binding" refers to an interaction between protein or peptide and a certain substance, such as its specific ligand or antibody, and in some cases its agonists or antagonists. The interaction is dependent upon the presence of a particular structure of the protein recognized by the binding molecule (e.g., the antigenic determinant or epitope). For example, if an antibody specifically binds epitope "A," the presence of a polypeptide containing epitope A or the presence of free unlabeled epitope A will reduce the amount of labeled epitope A that binds to the antibody in a reaction containing free labeled epitope A and the antibody. Conversely, the presence of a polypeptide that does not contain epitope A will not reduce the amount of labeled epitope A that binds to the antibody. Highly specific binding indicates that the protein or peptide binds to its particular ligand, antibody, etc., and does not bind in a significant amount to other proteins present in the sample. Typically, a specific or selective reaction will be at least twice the background signal or noise and more typically more than 10 to 100 times the background signal or noise.

[116] "Stringent conditions" refer to conditions that permit hybridization between complementary polynucleotide sequences. Suitably stringent conditions can be defined by, for example, the concentrations of salt or formamide in the prehybridization and hybridization solutions, or by the hybridization temperature. Stringency can be increased by reducing the concentration of salt, increasing the concentration of formamide, or raising the hybridization temperature. Stringent conditions are dependent upon the type of probe as well as the length of the probe and the GC content of the probe. "Stringent conditions" typically

occur within a range from about $T_m - 5^\circ\text{C}$ (5°C below the melting temperature (T_m) of the probe) to about $T_m - 20 - 25^\circ\text{C}$ for a cRNA probe and to about $T_m - 15^\circ\text{C}$ for an oligonucleotide probe. **"Highly stringent conditions"** refers to conditions under which a probe will hybridize to its target sequence, typically in a complex mixture of nucleic acid sequences, but will not substantially hybridize to other sequences. One example of high stringency conditions for a cRNA probe that is 1,000 nucleotides in length and has a GC content of about 60% is about $55 - 65^\circ\text{C}$ in 50% formamide, 0.1 X SSC, and 200 $\mu\text{g/ml}$ sheared and denatured salmon sperm DNA. One example of low stringency conditions for the same probe in 50% formamide, 0.1 X SSC, and 200 $\mu\text{g/ml}$ sheared and denatured salmon sperm DNA would be $30 - 35^\circ\text{C}$. **"Very highly stringent conditions"** indicates that there must be complete identity between the sequences. The temperature range corresponding to a particular level of stringency can be narrowed further by calculating the purine to pyrimidine ratio of the nucleic acid of interest and adjusting the temperature accordingly. Variations on and modifications of the above ranges and conditions will be readily appreciated by those of skill in the art in view of the present application. As will be understood by those of skill in the art in view of the present application, the stringency of hybridization can be altered to identify or detect identical or related polynucleotide sequences. One guide for nucleic acid hybridization is Tijssen, Laboratory Techniques in Biochemistry and Molecular Biology-v.24 Hybridization with Nucleic Acid Probes, Part I "Overview of principles of hybridization and the strategy of nucleic acid assays" (New York: Elsevier 1993).

[117] **"Substantially purified"** refers to nucleic acid or amino acid sequences that are removed from their natural environment and are separated from other components from such natural environment, and are at least about 60% free, preferably about 75% or 85% free, and most preferably about 90%, 95% or 99% free from such other components with which they are naturally associated. Substantially purified preferably indicates a substantially homogeneous state and can be in either a dry or aqueous solution or other composition as desired. Purity and homogeneity can be assayed by standard methods, for example on a mass or molar basis, using analytical chemistry techniques such as polyacrylamide gel electrophoresis or high performance liquid chromatography.

[118] "Substitution" when referring to a change in a nucleotide or amino sequence indicates the replacement of one or more nucleotides or amino acids by different nucleotides or amino acids, respectively.

[119] "Variant," see Analog.

5 [120] "Western blotting" or "Western analysis" refers to a method for detecting specific protein sequences. For example, the process can be performed by electrophoresing a protein mixture in a denaturing agarose or acrylamide gel, transferring the mixture onto a membrane, and incubating it with an antibody raised against the protein of interest.

[121] Other terms and phrases are defined in other portions of this application.

10

C. SELECTION OF DESIRED ANTIGENIC PEPTIDES FOR GPCRs AND OTHER POLYPEPTIDES

[122] The present invention provides improved antigenic peptides, for example as set forth in Figure 2, SEQ ID NOS. 692-2292, and improved methods of identifying such
15 antigenic peptides from known or publicly available sequences of polypeptides or proteins, i.e., from a candidate polypeptide sequence. Polypeptide and protein are used in their traditional sense to indicate lengthy amino acid molecules, whereas the antigenic peptide has a length significantly less than the length of the corresponding polypeptide or protein such that the antigenic peptide is capable of providing significantly improved antigenicity relative
20 to the corresponding polypeptide or protein, typically improved specificity, affinity or avidity. The candidate polypeptide can be, for example, a human protein or polypeptide, a naturally occurring protein or polypeptide or a synthetic or recombinant protein or polypeptide.

[123] The antigenic peptides are typically 5 to about 100 amino acids in length, preferably
25 6 to about 50 amino acids, and further preferably 7 to about 20 amino acids. The antigenic peptides include short antigenic amino acid sequences (i.e., peptides comprising only a portion of an antigenic sequence as set forth in Figure 2 or as identified using the methods described herein, plus an insignificant number of additional amino acids at one or both ends, where insignificant indicates that the extra amino acids do not substantially interfere with the
30 antigenicity of the antigenic peptide). Such short antigenic peptides can be identical to at least 5, 6, 7 or more consecutive amino acids of the sequences herein or identified using the methods described herein, or can have one or two (or more, with increasing length)

conservative amino acid substitution for antigenic peptides comprising more than 6 or 7 consecutive amino acids of the sequences herein or identified using the methods described herein. Antigenic peptides and sequences, and related antibodies and assays and the like, are discussed further elsewhere herein with regard to GPCRs, but such discussions applies to all
5 antigenic peptides produced according to the methods herein, including proteins and polypeptides such as kinases, phosphatases and any other desired protein or polypeptide.

[124] The identification or selection methods comprise searching the candidate polypeptide sequence using a comparison window of the desired length, then selecting against or rejecting amino acid sequences of the length and having at least 1 characteristic
10 selected from the group consisting of 1) at least two consecutive prolines, 2) at least two consecutive serines, 3) at least two consecutive lysines, 4) at least two consecutive arginines, 5) at least two consecutive aspartic acids, 6) at least two consecutive glutamic acids, 7) methionine, 8) tryptophan, and 9) at least five consecutive amino acids comprising no charged amino acids. Preferably, at least 5, 7, 8, or all of the characteristics are selected.

15 [125] The identification or selection methods can also comprise selecting against amino acid sequences having at least 5 consecutive amino acids that are identical to an alternative amino acid sequence from an alternative polypeptide, i.e., some polypeptide other than the candidate polypeptide from which the selected antigen was derived, that is different from the candidate polypeptide, posttranslational modification sites, or highly hydrophobic sequences,
20 which indicates sequences adequately hydrophobic to be located in a lipid membrane such as a cellular membrane. The posttranslational modification sites can be phosphorylation or glycosylation sites.

[126] The methods can further comprise performing a BLAST-type or a FAST-type analyses for the candidate polypeptide sequence. Exemplary BLAST-type and FAST-type
25 analyses are described above, including BLAST, BLASTP, BLASTX, FASTA, and FASTX.

D. GENERAL DISCUSSION OF ANTIGENIC PEPTIDES RELATED TO PARTICULAR GPCRS

[127] ANTIGENIC PEPTIDES GENERALLY:

30 [128] The present invention includes antigenic peptides able to induce specific immunogenic responses, and corresponding binding partners. Such antigenic peptides and

binding partners can be cloned, expressed, isolated, purified, and otherwise obtained or manipulated according to routine methods known in the art in view of the present application.

[129] The present invention further relates to antigenic peptides having an amino acid sequence from a particular GPCR, including analogs, mimetics, fragments, derivatives, and the like of such antigenic peptides. See SEQ ID NOS. 1-2292, Figures 1-3. The antigenic peptides may be recombinant, natural or synthetic. The antigenic peptides include (i) antigenic peptides in which one or more of the amino acid residues are substituted with a conserved or non-conserved amino acid residue (preferably a conserved amino acid residue) and such substituted amino acid residue may or may not be one encoded by the genetic code, (ii) antigenic peptides in which one or more of the amino acid residues includes a substituent group, (iii) antigenic peptides in which the mature polypeptide is complexed (*e.g.*, fused or otherwise bonded) with another compound, such as a compound to increase the half-life of the polypeptide (for example, polyethylene glycol), and (iv) antigenic peptides in which additional amino acids are fused to the antigenic peptide. Preparing and using such analogs, etc., are within the scope of those skilled in the art in view of the present application. The antigenic peptides additionally include antigenic peptides that have at least about 90% identity to the given antigenic peptide, and preferably at least about 95% identity to the antigenic peptide. The antigenic peptides additionally include antigenic peptides that contain at least five, six, seven or more consecutive amino acids that are identical to the given antigenic peptide, as well as antigenic peptides that contain at least six, seven, eight or more consecutive amino acids that are identical to the given antigenic except for one or two conservative changes within this such stretch of amino acids. The antigenic peptides of the present invention can be produced by peptide synthesis.

[130] EXPRESSION PROFILES BASED ON PROTEINS:

[131] An expression profile of a particular GPCR in one or more tissues can be made using antibodies or other binding partners produced using the antigenic peptides herein, then using traditional approaches such as Western blotting, immunohistochemistry analysis, protein array, ligand-binding studies, radioimmunoassay (RIA), and high performance liquid chromatography (HPLC), and immunohistochemistry analysis. H&E staining and other analyses can be used in combination with such immunologically-based analyses.

[132] SCREENING FOR ACTIVITY:

[133] The activity or functionality of an antigenic peptide can be measured using any of a variety of assays known in the art. Similarly, the specificity or affinity of an antibody or other binding partner made using the antigenic peptide can be measured using any of a variety of assays known in the art

- 5 [134] The activity or functionality of a particular GPCR may be measured using any of a variety of functional assays in which activation of the receptor in question results in an observable change in the level of some second messenger system, including but not limited to adenylyl cyclase, calcium mobilization, arachidonic acid release, ion channel activity, inositol phospholipid hydrolysis, or guanylyl cyclase. Heterologous expression systems utilizing
10 appropriate host cells to express the nucleic acid of the subject invention are used to obtain the desired second messenger coupling. Receptor activity may also be assayed in an oocyte expression system.

[135] **PROTEIN PURIFICATION:**

- [136] The antigenic peptides and proteins or polypeptides containing them can be purified
15 by standard methods, including but not limited to salt or alcohol precipitation, preparative disc-gel electrophoresis, isoelectric focusing, high pressure liquid chromatography (HPLC), reversed-phase HPLC, gel filtration, cation and anion exchange, partition chromatography, and countercurrent distribution. Suitable purification methods will be readily apparent to those skilled in the art in view of the present application and are disclosed, *e.g.*, in Guide to
20 Protein Purification, Methods in Enzymology, Vol. 182, M. Deutscher, Ed., Academic Press, New York, NY (1990). Purification steps can be followed as part of carrying out assays for ligand binding activity. Particularly where a particular GPCR is being isolated from a cellular or tissue source, it is preferable to include one or more inhibitors of proteolytic enzymes in the assay system, such as phenylmethylsulfonyl fluoride (PMSF).

25

E. CERTAIN ASSAYS, ANTIBODIES, PROBES, THERAPEUTICS, AND
OTHER SYSTEMS AND ASPECTS, OF THE INVENTION

1. SYSTEMS AND METHODS FOR SCREENING FOR A
PARTICULAR GPCR OR ANTIGENIC PEPTIDE

- 30 [137] **SCREENING FOR ANTIGENIC PEPTIDES:**

[138] As noted elsewhere herein, the present invention provides antigenic peptides and antibodies that are specific for a particular GPCR. The invention also provides systems and

methods for using or detecting such peptides, and antibodies against such peptides or corresponding GPCRs in a sample. The assays are based on the detection of the antigenic peptides, typically as they are displayed by the particular GPCR, or the detection of antibodies produced against the particular antigenic peptides and corresponding GPCRs.

5 **[139] SCREENING FOR/WITH ANTIGENIC PEPTIDES:**

[140] Many assays are characterized by the ability of antigenic peptides for a particular GPCR to be bound by antibodies against them, and the ability of antibodies produced against such antigenic peptides to bind to antigens or epitopes of the particular GPCR in a sample. Some exemplary assays are described below and elsewhere herein.

10 **[141] LIST OF ASSAYS:**

[142] A variety of assays can detect antibodies that bind specifically to the desired protein in or from a sample, or detect a desired protein bound to one or more antibodies in or from the sample. Exemplary assays are described in detail in *Antibodies: A Laboratory Manual*, Harlow and Lane (eds.), Cold Spring Harbor Laboratory Press (1988). Representative
15 examples of such assays include: countercurrent immuno-electrophoresis (CIEP), radioimmunoassays, radioimmunoprecipitations, enzyme-linked immunosorbent assays (ELISA), dot blot assays, inhibition or competition assays, sandwich assays, immunostick (dip-stick) assays, simultaneous assays, immunochromatographic assays, immunofiltration assays, latex bead agglutination assays, immunofluorescent assays, biosensor assays, and
20 low-light detection assays. See U.S. Pat. Nos. 4,376,110 and 4,486,530; WO 94/25597; WO/25598.

[143] ENZYME-LINKED IMMUNOSORBENT ASSAYS (ELISA):

[144] One assay for the detection of a particular GPCR is a sandwich assay such as an enzyme-linked immunosorbent assay (ELISA). In one preferred embodiment, the ELISA
25 comprises the following steps: (1) coating the particular GPCR antigenic peptide onto a solid phase, (2) incubating a sample suspected of containing anti-particular GPCR antibodies with the antigenic peptide coated onto the solid phase under conditions that allow the formation of an antigen-antibody complex, (3) adding an anti-antibody (such as anti-IgG) conjugated with a label to be captured by the resulting antigen-antibody complex bound to the solid phase,
30 and (4) measuring the captured label and determining therefrom whether the sample contains anti-particular GPCR antibodies.

[145] IMMUNOFLUORESCENCE ASSAY:

[146] A fluorescent antibody test (FA-test) uses a fluorescently labeled antibody able to bind to one of the proteins of the invention. For detection, visual determinations are made by a technician using fluorescence microscopy, yielding a qualitative result. In one embodiment, this assay is used for the examination of tissue samples or histological sections.

5 [147] **BEAD AGGLUTINATION ASSAYS:**

[148] In latex bead agglutination assays, antibodies to one or more of the antigenic peptides of the present invention are conjugated to latex beads. The antibodies conjugated to the latex beads are then contacted with a sample under conditions permitting the antibodies to bind to desired proteins in the sample, if any. The results are then read visually, yielding a
10 qualitative result. In some embodiments, as with certain other assays, this format can be used in the field for on-site testing.

[149] **ENZYME IMMUNOASSAYS:**

[150] Enzyme immunoassays (EIA) include a number of different assays that can use the antibodies described in the present application. For example, a heterogeneous indirect EIA
15 uses a solid phase coupled with an antibody of the invention and an affinity purified, anti-IgG immunoglobulin preparation. The solid phase can be a polystyrene microtiter plate. The antibodies and immunoglobulin preparation are then contacted with the sample under conditions permitting antibody binding, which conditions are well known in the art. The results of such an assay can be read visually or using a device such as a spectrophotometer,
20 such as an ELISA plate reader, to yield a quantitative result. An alternative solid phase EIA format includes plastic-coated ferrous metal beads able to be moved during the procedures of the assay by means of a magnet. Yet another alternative is a low-light detection immunoassay format. In this highly sensitive format, the light emission produced by appropriately labeled bound antibodies are quantified automatically. Preferably, the reaction
25 is performed using microtiter plates.

[151] In an alternative embodiment, a radioactive tracer is substituted for the enzyme-mediated detection in an EIA to produce a radioimmunoassay (RIA).

[152] **SANDWICH ASSAY:**

[153] In a capture-antibody sandwich enzyme assay, the desired protein is bound between
30 an antibody attached to a solid phase, preferably a polystyrene microtiter plate, and a labeled antibody. The results can be measured, for example, using a spectrophotometer, such as an ELISA plate reader.

[154] SEQUENTIAL AND SIMULTANEOUS ASSAYS:

[155] In a sequential assay format, reagents are allowed to incubate with the capture antibody in a stepwise fashion. The test sample is first incubated with the capture antibody. Following a wash step, incubation with the labeled antibody occurs. In a simultaneous assay, the two incubation periods described in the sequential assay are combined. This eliminates one incubation period plus a wash step.

[156] IMMUNOSTICK (DIP-STICK) ASSAYS:

[157] A dipstick/immunostick format is essentially an immunoassay using a polystyrene paddle or dipstick instead of a polystyrene microtiter plate as the solid phase. Reagents are the same and the format can either be simultaneous or sequential.

[158] IMMUNOCHROMATOGRAPHIC ASSAYS:

[159] In a chromatographic strip test format, a capture antibody and a labeled antibody are dried onto a chromatographic strip, which typically comprises nitrocellulose or high porosity nylon bonded to cellulose acetate. The capture antibody is usually spray dried as a line at one end of the strip. At this end, there is an absorbent material that is in contact with the strip. At the other end of the strip, the labeled antibody is deposited in a manner that prevents it from being absorbed onto the membrane. Usually, the label attached to the antibody is a latex bead or colloidal gold. The assay may be initiated by applying the sample immediately in front of the labeled antibody.

[160] IMMUNOFILTRATION ASSAYS:

[161] Immunofiltration/immunoconcentration formats combine a large solid-phase surface with directional flow of sample/reagents, which concentrates and accelerates the binding of antigen to antibody. In an exemplary format, the test sample is preincubated with a labeled antibody, and then applied to a solid phase such as fiber filters, nitrocellulose membranes, or the like. The solid phase can also be precoated with latex or glass beads coated with capture antibody. Detection of analyte is the same as that in a standard immunoassay. The flow of sample/reagents can be modulated by either vacuum or the wicking action of an underlying absorbent material.

[162] BIOSENSOR ASSAYS:

[163] A threshold biosensor assay is a sensitive, instrumented assay amenable to screening large numbers of samples at low cost. In one embodiment, such an assay comprises the use of light-addressable potentiometric sensors wherein the reaction involves

the detection of a pH change due to binding of the desired protein by capture antibodies, bridging antibodies, and urease-conjugated antibodies. Upon binding, a pH change is effected that is measurable by translation into electrical potential (μ volts). The assay typically occurs in a very small reaction volume, and is very sensitive; the reported detection
5 limit of the assay is 1,000 molecules of urease per minute.

2. ANTIBODIES

[164] ANTIBODIES GENERATED AGAINST A PARTICULAR ANTIGENIC PEPTIDE AND ITS CORRESPONDING GPCR:

10 [165] Highly specific, high affinity or antibodies against a particular GPCR or other polypeptide can be generated using the antigenic peptides herein and using antibody generation techniques as described herein or elsewhere. The antibodies produced using the antigenic peptides of the present invention, for example, have a specificity for the corresponding GPCR such that the antibodies can selectively detect the corresponding GPCR
15 in a sample containing non-desired or contaminating proteins or polypeptides, such as a tissue or blood sample. Preferably, the antibodies have a high specificity such that no significant amounts of such proteins or polypeptides are detected, and further preferably have a specificity such that only insubstantial to essentially zero amounts of non-desirable proteins are detected. The antibodies produced using the antigenic peptides of the present invention,
20 for example, typically have an affinity or avidity constant (K_a) of at least about 10^7 liters/mole, typically a high affinity or avidity at least about 10^9 liters/mole, preferably at least about 10^{10} liters/mole, and further preferably at least about 10^{11} liters/mole.

[166] The antibodies can be used to conduct immunohistochemistry and other analyses of a variety of tissue samples to determine expression of a particular GPCR in such tissues, for
25 diagnostic assays, and for other desired purposes. The specification will now discuss a variety of antibody types, methods, uses, etc.

[167] ANTIBODIES GENERALLY:

[168] In some embodiments, the present invention provides antibodies and other binding partners created using the antigenic peptides herein and directed to a particular GPCR from
30 which the antigenic peptides were derived. Compositions and uses for such antibodies are contemplated, including diagnostic, medicament, and therapeutic uses. Various diagnostic, medicament, and therapeutic uses for antibodies have been reviewed above and, for example,

in Goldenberg et al., *Semin. Cancer Biol.*, 1(3):217-225 (1990); Beck et al., *Semin. Cancer Biol.*, 1(3):181-188 (1990); Niman, *Immunol. Ser.*, 53:189-204 (1990); Endo, *Nippon Igaku Hoshasen Gakkai Zasshi* (Japan), 50(8):901-909 (1990); and, U.S. Pat. No. 6,214,984.

[169] Recognized immunoglobulin genes include the kappa, lambda, alpha, gamma, delta, epsilon, and mu constant region genes, as well as myriad immunoglobulin variable region genes. Light chains are classified as either kappa or lambda. Heavy chains are classified as gamma, mu, alpha, delta, or epsilon, which in turn define the immunoglobulin classes, IgG, IgM, IgA, IgD, and IgE, respectively. An exemplary immunoglobulin (antibody) structural unit comprises a tetramer. Each tetramer is composed of two identical pairs of antigenic peptide chains, each pair having one "light" chain (about 25 kD) and one "heavy" chain (about 50-70 kD). The N-terminus of each chain defines a variable region of about 100 to 110 or more amino acids primarily responsible for antigen recognition. The terms variable light chain (V_L) and variable heavy chain (V_H) refer to these light and heavy chains respectively.

15 [170] **ANTI-IDIOTYPIC ANTIBODIES:**

[171] The present invention encompasses anti-idiotypic antibodies, including polyclonal and monoclonal anti-idiotypic antibodies, that are produced using the antibodies described herein as antigens. These anti-idiotypic antibodies are useful because they may mimic the structures of the antigenic peptides set forth herein.

20 [172] Techniques for producing antibodies, including antibody fragments, include the following.

a. Antibody Preparation

(i) Polyclonal Antibodies

25 [173] **ANTIBODY PREP - POLYCLONAL:**

[174] Polyclonal antibodies are generally raised in animals by multiple subcutaneous (sc) or intraperitoneal (ip) injections of the relevant antigen and an adjuvant. It may be useful to conjugate the relevant antigen to a protein that is immunogenic in the species to be immunized, e.g., keyhole limpet hemocyanin, serum albumin, bovine thyroglobulin, or soybean trypsin inhibitor, using a bifunctional or derivatizing agent, for example, maleimidobenzoyl sulfosuccinimide ester (conjugation through cysteine residues), N-

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hydroxysuccinimide (through lysine residues), glutaraldehyde, succinic anhydride, SOCl_2 , or $\text{R}^1\text{N}=\text{C}=\text{NR}$, where R and R^1 are different alkyl groups.

[175] ANTIBODY PREP - ADJUVANTS (ALL ABS):

- [176]** Suitable adjuvants for the vaccination of animals for the production of polyclonal, monoclonal, and other antibodies include but are not limited to Adjuvant 65 (containing peanut oil, mannide monooleate, and aluminum monostearate); Freund's complete or incomplete adjuvant; mineral gels such as aluminum hydroxide, aluminum phosphate, and alum; surfactants such as hexadecylamine, octadecylamine, lysolecithin, dimethyldioctadecylammonium bromide, N,N-dioctadecyl-N',N'-bis(2-hydroxymethyl) propanediamine, methoxyhexadecylglycerol, and pluronic polyols; polyanions such as pyran, dextran sulfate, poly IC, polyacrylic acid, and carbopol; peptides such as muramyl dipeptide, dimethylglycine, tuftsin, stress proteins, core-containing proteins from a positive stranded RNA virus, *see* US Pat. No. 6,153,378; and, oil emulsions. The antigenic peptides could also be administered following incorporation into liposomes or other microcarriers.
- [177]** Information concerning adjuvants and various aspects of immunoassays are disclosed, *e.g.*, in the series by P. Tijssen, Practice and Theory of Enzyme Immunoassays, 3rd Edition (1987), Elsevier, New York. Other useful references covering methods for preparing polyclonal antisera include Microbiology, Hoeber Medical Division, Harper and Row (1969); Landsteiner, Specificity of Serological Reactions, Dover Publications, New York (1962); and, Williams, et al., Methods in Immunology and Immunochemistry, Vol. 1, Academic Press, New York (1967).
- [178]** Animals can be immunized against the antigen, immunogenic conjugates, or derivatives by combining 1 mg or 1 μg of the peptide or conjugate (for rabbits or mice, respectively) with 3 volumes of Freund's complete adjuvant and injecting the solution intradermally at multiple sites. One month later the animals are boosted with 1/5 to 1/10 the original amount of peptide or conjugate in Freund's complete adjuvant by subcutaneous injection at multiple sites. Seven to 14 days later the animals are bled and the serum is assayed for antibody titer. Animals are boosted until the titer plateaus. Preferably, the animal is boosted with the conjugate of the same antigen, but conjugated to a different protein or through a different cross-linking reagent. Conjugates also can be made in recombinant cell culture as protein fusions. In addition, aggregating agents such as alum can be suitably used to enhance the immune response.

(ii) Monoclonal Antibodies

[179] ANTIBODY PREP - MONOCLONAL:

5 **[180]** Monoclonal antibodies are obtained from a population of substantially homogeneous antibodies, *e.g.*, the individual antibodies comprising the population are identical except for possible naturally occurring mutations that may be present in minor amounts. For example, monoclonal antibodies can be made using the hybridoma method first described by Kohler and Milstein, *Nature*, 256:495 (1975), or can be made by recombinant DNA methods, or otherwise as desired.

10 **[181]** In the hybridoma method, a mouse, or other appropriate host animal, such as a hamster, is immunized as described herein to elicit lymphocytes that produce or are capable of producing antibodies that will bind specifically to the antigenic peptide used for immunization. Alternatively, lymphocytes may be immunized *in vitro*. Lymphocytes then are fused with myeloma cells using a suitable fusing agent, such as polyethylene glycol, to
15 form a hybridoma cell, Goding, *Monoclonal Antibodies: Principles and Practice*, pp. 59-103, Academic Press (1986).

[182] The hybridoma cells thus prepared are seeded and grown in a suitable culture medium that preferably contains one or more substances that inhibit the growth or survival of the unfused, parental myeloma cells. For example, if the parental myeloma cells lack the
20 enzyme hypoxanthine guanine phosphoribosyl transferase (HGPRT or HPRT), the culture medium for the hybridomas typically will include hypoxanthine, aminopterin, and thymidine (HAT medium), which substances prevent the growth of HGPRT-deficient cells.

[183] Preferred myeloma cells are those that fuse efficiently, support stable high-level production of antibody by the selected antibody-producing cells, and are sensitive to a
25 medium such as HAT medium, for example murine myeloma lines, such as those derived from MOPC-21 and MPC-11 mouse tumors available from the Salk Institute Cell Distribution Center, San Diego, CA USA, and SP-2 cells available from the American Type Culture Collection, Rockville, MD USA. Human myeloma and mouse-human heteromyeloma cell lines have also been described for the production of human monoclonal
30 antibodies, Kozbor, *J. Immunol.*, 133:3001 (1984); Brodeur et al., *Monoclonal Antibody Production Techniques and Applications*, pp. 51-63, Marcel Dekker, Inc., New York (1987).

[184] Culture medium in which hybridoma cells are growing is assayed for production of monoclonal antibodies directed against the antigenic peptide. The binding specificity of monoclonal antibodies produced by hybridoma cells can be determined by immunoprecipitation or by an *in vitro* binding assay, such as radioimmunoassay (RIA) or enzyme-linked immunosorbent assay (ELISA). The binding affinity of the monoclonal antibody can, for example, be determined by the Scatchard analysis of Munson and Pollard, Anal. Biochem., 107:220 (1980). The antibodies produced using the antigenic peptides of the present invention, for example, typically have an affinity or avidity constant (K_a) of at least about 10^7 liters/mole, typically a high affinity or avidity at least about 10^9 liters/mole, preferably at least about 10^{10} liters/mole, and further preferably at least about 10^{11} liters/mole.

[185] After hybridoma cells are identified that produce antibodies of the desired specificity, affinity, or activity, the clones may be subcloned by limiting dilution procedures and grown by standard methods (Goding, *supra*). Suitable culture media for this purpose include, for example, D-MEM or RPMI-1640 medium. In addition, the hybridoma cells may be grown *in vivo* as ascites tumors in an animal.

[186] The monoclonal antibodies secreted by the subclones are suitably separated from the culture medium, ascites fluid, or serum by conventional immunoglobulin purification procedures such as, for example, protein A-SEPHAROSETM, hydroxyapatite chromatography, gel electrophoresis, dialysis, or affinity chromatography.

[187] DNA encoding the monoclonal antibodies can be readily isolated and sequenced using conventional procedures (e.g., by using oligonucleotide probes that are capable of binding specifically to genes encoding the heavy and light chains of murine antibodies). The hybridoma cells serve as a preferred source of such DNA. Once isolated, the DNA may be placed into expression vectors, which can then be transfected into host cells such as *E. coli* cells, simian COS cells, Chinese hamster ovary (CHO) cells, or myeloma cells that do not otherwise produce immunoglobulin protein, to obtain the synthesis of monoclonal antibodies in the recombinant host cells. Review articles on recombinant expression in bacteria of DNA encoding antibody include Skerra et al., Curr. Opinion in Immunol., 5:256-262 (1993), and Pluckthun, Immunol. Revs., 130:151-188 (1992).

[188] **MOABS - COMBINATORIAL:**

[189] In a further embodiment, antibodies or antibody fragments can be isolated from antibody phage libraries generated using the techniques described in McCafferty et al.,

Nature, 348:552-554 (1990), using the proper antigen such as CD11a, CD18, IgE, or HER-2 to select for a suitable antibody or antibody fragment. Clackson et al., Nature, 352:624-628 (1991) and Marks et al., J. Mol. Biol., 222:581-597 (1991) describe the isolation of murine and human antibodies, respectively, using phage libraries. Subsequent publications describe the production of high affinity (nM range) human antibodies by chain shuffling, Marks et al., Biotechnology, 10:779-783 (1992), as well as combinatorial infection and *in vivo* recombination as strategies for constructing very large phage libraries, Waterhouse et al., Nuc. Acids. Res., 21:2265-2266 (1993). Combinatorial antibodies are also discussed in Huse et al., Science 246:1275-1281 (1989), and Sastry et al., Proc. Natl. Acad. Sci. USA, 86:5728-5732 (1989), and Altling-Mees et al., Strategies in Molecular Biology 3:1-9 (1990). These references describe a system commercially available from Stratacyte, La Jolla, CA USA. Briefly, mRNA is isolated from a B cell population and utilized to create heavy and light chain immunoglobulin cDNA expression libraries in the λ IMMUNOZAP(H) and λ IMMUNOZAP(L) vectors. These vectors may be screened individually or co-expressed to form Fab fragments or antibodies, see Huse et al., *supra*; see also Sastry et al., *supra*. Positive plaques can subsequently be converted to a non-lytic plasmid, which allows for high-level expression of monoclonal antibody fragments from *E. coli*.

[190] HUMANIZED MOAB:

[191] Binding partners can also be constructed utilizing recombinant DNA techniques to incorporate the variable regions of a gene that encode a specifically binding antibody. The construction of these binding partners can be readily accomplished by one of ordinary skill in the art in view of the present application. See Larrick et al., Biotechnology, 7:934-938 (1989); Riechmann et al., Nature, 332:323-327 (1988); Roberts et al., Nature, 328:731-734 (1987); Verhoeven et al., Science 239:1534-1536 (1988); Chaudhary et al., Nature, 339:394-397 (1989); see also U.S. Pat. No. 5,132,405 entitled "Biosynthetic Antibody Binding Sites".) For example, the DNA can be modified by substituting the coding sequence for human heavy- and light-chain constant domains in place of homologous murine sequences, U.S. Pat. No. 4,816,567; Morrison, et al., Proc. Nat. Acad. Sci., 81:6851 (1984), or by covalently joining to the immunoglobulin coding sequence all or part of the coding sequence for a non-immunoglobulin polypeptide. In another example, DNA segments encoding the desired antigen-binding domains specific for the protein or peptide of interest are amplified from appropriate hybridomas and inserted directly into the genome of a cell that produces human

antibodies. See Verhoeyen et al., *supra*; see also Reichmann et al., *supra*. Some of these techniques transfer the antigen-binding site of a specifically binding mouse or rat monoclonal antibody or the like to a human antibody. Such antibodies can be preferable for therapeutic use in humans because they are typically not as antigenic as rat or mouse antibodies.

- 5 [192] In an alternative embodiment, genes that encode the variable region from a hybridoma producing a monoclonal antibody of interest can be amplified using oligonucleotide primers for the variable region. These primers may be synthesized by one of ordinary skill in the art, or may be purchased from commercially available sources. For instance, primers for mouse and human variable regions including, among others, primers for
- 10 $V_{H\alpha}$, $V_{H\beta}$, $V_{H\gamma}$, $V_{H\delta}$, C_{H1} , V_L , and C_L regions are available from Stratacyte (La Jolla, CA). These primers may be utilized to amplify heavy- or light-chain variable regions, which may then be inserted into vectors such as IMMUNOZAPTM(H) or IMMUNOZAPTM(L) (Stratacyte), respectively. These vectors may then be introduced into *E. coli* for expression. Utilizing these techniques, large amounts of a single-chain protein containing a fusion of the
- 15 V_H and V_L domains may be produced, see Bird et al., Science 242:423-426 (1988).

[193] ANTIBODY SUBSTITUTIONS - NON-IMMUNOGLOBULIN POLYPEPTIDES (ALL ABS):

- [194] Non-immunoglobulin polypeptides can be substituted in monoclonal and other antibodies described herein for the constant domains of an antibody, or they can be
- 20 substituted for the variable domains of one antigen-combining site of an antibody to create a chimeric bivalent antibody comprising one antigen-combining site having specificity for an antigen and another antigen-combining site having specificity for a different antigen.

[195] CHIMERICS:

- [196] Chimeric or hybrid antibodies can also be prepared *in vitro* using known methods in
- 25 synthetic protein chemistry, including those involving crosslinking agents, in view of the present application. For example, immunotoxins may be constructed using a disulfide-exchange reaction or by forming a thioether bond. Examples of suitable reagents for this purpose include iminothiolate and methyl-4-mercaptobutyrimidate.

[197] ANTIBODY LABELING (ALL ABS):

- 30 [198] For diagnostic applications or otherwise as desired, and for monoclonal and other antibodies described herein, the antibodies and other binding partners typically will be labeled with a detectable moiety. The detectable moiety can be any moiety that is capable of

producing, either directly or indirectly, a detectable signal. For example, the detectable moiety may be a radioisotope, such as ^3H , ^{14}C , ^{32}P , ^{35}S , or ^{125}I ; a fluorescent or chemiluminescent compound, such as fluorescein isothiocyanate, rhodamine, or luciferin; or an enzyme, such as alkaline phosphatase, beta-galactosidase, or horseradish peroxidase. Any method known in the art for conjugating the antibody or binding partner to the detectable moiety may be employed, including those methods described by Hunter et al., *Nature*, 144:945 (1962); David et al., *Biochemistry*, 13:1014 (1974); Pain et al., *J. Immunol. Meth.*, 40:219 (1981); and Nygren, *J. Histochem. Cytochem.*, 30:407 (1982).

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(iii) Humanized And Human Antibodies

[199] HUMANIZED AB GENERALLY:

[200] Methods for humanizing non-human antibodies are well known in the art and have been discussed in part above. Generally, a humanized antibody has one or more amino acid residues introduced into it from a source which is non-human. These non-human amino acid residues are often referred to as "import" residues, which are typically taken from an "import" variable domain. Humanization can be performed essentially following the method of Winter and co-workers, Jones et al., *Nature*, 321:522-525 (1986); Riechmann et al., *Nature*, 332:323-327 (1988); Verhoeven et al., *Science*, 239:1534-1536 (1988), by substituting rodent CDRs or CDR sequences for the corresponding sequences of a human antibody. Accordingly, such humanized antibodies are chimeric antibodies, U.S. Pat. No. 4,816,567, wherein substantially less than an intact human variable domain has been substituted by the corresponding sequence from a non-human species. In practice, humanized antibodies are typically human antibodies in which some CDR residues and possibly some FR residues are substituted by residues from analogous sites in rodent antibodies.

[201] The choice of human variable domains, both light and heavy, to be used in making humanized antibodies is very important to reduce antigenicity. According to the so-called "best-fit" method, the sequence of the variable domain of a rodent antibody is screened against the entire library of known human variable-domain sequences. The human sequence that is closest to that of the rodent is then accepted as the human framework (FR) for the humanized antibody. Sims et al., *J. Immunol.*, 151:2296 (1993); Chothia and Lesk, *J. Mol. Biol.*, 196:901 (1987). Another method uses a particular framework derived from the consensus sequence of all human antibodies of a particular subgroup of light or heavy chains.

The same framework may be used for several different humanized antibodies. Carter et al., Proc. Natl. Acad. Sci. USA, 89:4285 (1992); Presta et al., J. Immunol., 151:2623 (1993).

[202] It is typically desirable that antibodies be humanized with retention of high affinity for the antigen and other favorable biological properties. To achieve this goal, according to one method, humanized antibodies are prepared by a process of analysis of the parental sequences and various conceptual humanized products using three-dimensional models of the parental and humanized sequences. Three-dimensional immunoglobulin models are commonly available and are familiar to those skilled in the art. Computer programs are available that illustrate and display probable three-dimensional conformational structures of selected candidate immunoglobulin sequences. Inspection of these displays permits analysis of the likely role of the residues in the functioning of the candidate immunoglobulin sequence, *e.g.*, the analysis of residues that influence the ability of the candidate immunoglobulin to bind antigen. In this way, FR residues can be selected and combined from the consensus and import sequences so that the desired antibody characteristic, such as increased affinity for the target antigen(s), is achieved. In general, CDR residues are directly and most substantially involved in influencing antigen binding.

[203] It is also possible to produce transgenic animals (*e.g.*, mice) that are capable, upon immunization, of producing a full repertoire of human antibodies in the absence of endogenous immunoglobulin production. For example, it has been described that the homozygous deletion of the antibody heavy-chain joining region (J_H) gene in chimeric and germ-line mutant mice results in complete inhibition of endogenous antibody production. Transfer of the human germ-line immunoglobulin gene array in such germ-line mutant mice will result in the production of human antibodies upon antigen challenge. *See, e.g.*, Jakobovits et al., Proc. Natl. Acad. Sci. USA, 90:2551-255 (1993); Jakobovits et al., Nature, 362:255-258 (1993); Bruggemann et al., Year Immuno., 7:33 (1993). Human antibodies can also be produced in phage-display libraries, Hoogenboom and Winter, J. Mol. Biol., 227:381 (1991); Marks et al., J. Mol. Biol., 222:581 (1991).

(iv) Antibody Fragments

[204] **ANTIBODY FRAGMENTS:**

[205] Various techniques have been developed for the production of antibody fragments. Such fragments can be derived via proteolytic digestion of intact antibodies, *see, e.g.*,

Morimoto et al., J. Biochem. Biophys. Meth. 24:107-117 (1992) and Brennan et al., Science, 229:81 (1985). Fragments can also be produced directly by recombinant host cells. For example, antibody fragments can be isolated from antibody phage libraries discussed above. Fab'-SH fragments can be directly recovered from *E. coli* and chemically coupled to form F(ab')₂ fragments, Carter et al., Biotechnology 10:163-167 (1992). F(ab')₂ fragments can be isolated directly from recombinant host cell culture. Other techniques for the production of antibody fragments will be apparent to the skilled practitioner.

(v) Bispecific Antibodies

10 [206] **BISPECIFIC ANTIBODIES GENERALLY:**

[207] Bispecific antibodies (BsAbs) are antibodies that have binding specificities for at least two different antigens. Bispecific antibodies can be derived from full-length antibodies or from antibody fragments, e.g., F(ab')₂ bispecific antibodies.

15 [208] Methods for making bispecific antibodies are known in the art. Traditional production of full-length bispecific antibodies is based on the coexpression of two immunoglobulin heavy chain-light chain pairs, where the two chains have different specificities, Millstein and Cuello, Nature, 305:537-539 (1983). Because of the random assortment of immunoglobulin heavy and light chains, these hybridomas (quadromas) produce a mixture of potentially 10 different antibody molecules, of which only one has the correct bispecific structure. Purification of the correct molecule, which is usually accomplished by affinity chromatography steps, is rather cumbersome, and the product yields are low. Similar procedures are disclosed in WO 93/08829, and in Traunecker et al., E.M.B.O. J., 10:3655-3659 (1991).

20 [209] According to another approach, antibody variable domains containing the desired binding specificities (antibody-antigen combining sites) are fused to immunoglobulin constant domain sequences. The fusion is preferably with an immunoglobulin heavy chain constant domain, comprising at least part of the hinge, C_H 2, and C_H 3 regions. It is preferred to have the first heavy-chain constant region (C_H 1) containing the site necessary for light chain binding, present in at least one of the fusions. DNAs encoding the immunoglobulin heavy chain fusions and, if desired, the immunoglobulin light chain, are inserted into separate expression vectors, and are co-transfected into a suitable host organism. This provides for great flexibility in adjusting the mutual proportions of the three polypeptide fragments in

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embodiments when unequal ratios of the three polypeptide chains used in the construction provide the improved yields. It is, however, possible to insert the coding sequences for two or all three polypeptide chains in one expression vector when the expression of at least two polypeptide chains in equal ratios results in high yields or when the ratios are of no particular
5 significance.

[210] ANTIBODIES - HYBRID IMMUNOGLOBULIN HEAVY CHAIN:

[211] In one embodiment of this approach, the bispecific antibodies are composed of a hybrid immunoglobulin heavy chain with a first binding specificity in one arm, and a hybrid immunoglobulin heavy chain-light chain pair (providing a second binding specificity) in the
10 other arm. This asymmetric structure may facilitate the separation of the desired bispecific compound from unwanted immunoglobulin chain combinations, as the presence of an immunoglobulin light chain in only one half of the bispecific molecule provides for a facile method of separation. This approach is discussed in WO 94/04690. For further details of generating bispecific antibodies see, for example, Suresh et al., Meth. Enzymol., 121:210
15 (1986).

[212] ANTIBODIES - CROSS-LINKED OR "HETEROCONJUGATE":

[213] Bispecific antibodies include cross-linked or "heteroconjugate" antibodies. For example, one of the antibodies in the heteroconjugate can be coupled to avidin, the other to biotin. Such antibodies have, for example, been proposed to target immune system cells to
20 unwanted cells, U.S. Pat. No. 4,676,980), and for treatment of HIV infection, WO 91/00360, WO 92/200373, and EP 03089). Heteroconjugate antibodies may be made using any convenient cross-linking methods. Suitable cross-linking agents are well known in the art, and are disclosed in U.S. Pat. No. 4,676,980, along with a number of cross-linking techniques.

[214] ANTIBODIES - DIABODIES:

[215] The "diabody" technology described by Hollinger et al., Proc. Natl. Acad. Sci. USA, 90:6444-6448 (1993) has provided an alternative mechanism for making BsAb fragments. The fragments comprise a heavy-chain variable domain (V_H) connected to a light-chain variable domain (V_L) by a linker that is too short to allow pairing between the two domains
30 on the same chain. Accordingly, the V_H and V_L domains of one fragment are forced to pair with the complementary V_L and V_H domains of another fragment, thereby forming two antigen-binding sites.

[216] Another strategy for making BsAb fragments by the use of single-chain Fv (sFv) dimers has also been reported. See Gruber et al., J. Immunol., 152:5368 (1994). These researchers designed an antibody comprising the V_H and V_L domains of a first antibody joined by a 25-amino-acid-residue linker to the V_H and V_L domains of a second antibody.

5 The refolded molecule bound to fluorescein and the T-cell receptor and redirected the lysis of human tumor cells that had fluorescein covalently linked to their surface.

[217] **ANTIBODIES - OTHER:**

[218] Techniques for generating bispecific antibodies from antibody fragments have also been described in the literature. For example, bispecific antibodies can be prepared using
10 chemical linkage. Brennan et al., Science, 229:81 (1985) describe a procedure wherein intact antibodies are proteolytically cleaved to generate F(ab')₂ fragments. These fragments are reduced in the presence of the dithiol complexing agent sodium arsenite to stabilize vicinal dithiols and prevent intermolecular disulfide formation. The Fab' fragments generated are then converted to thionitrobenzoate (TNB) derivatives. One of the Fab'-TNB derivatives is
15 then reconverted to the Fab'-thiol by reduction with mercaptoethylamine and is mixed with an equimolar amount of the other Fab'-TNB derivative to form the BsAb. The BsAbs produced can be used as agents for the selective immobilization of enzymes.

[219] Fab'-SH fragments can be directly recovered from *E. coli*, which can be chemically coupled to form bispecific antibodies. Shalaby et al., J. Exp. Med., 175:217-225 (1992)
20 describe the production of a fully humanized BsAb F(ab')₂ molecule. Each Fab' fragment was separately secreted from *E. coli* and subjected to directed chemical coupling *in vitro* to form the BsAb. The BsAb thus formed was able to bind to cells overexpressing the HER2 receptor and normal human T cells, as well as trigger the lytic activity of human cytotoxic lymphocytes against human breast tumor targets. See also Rodriguez et al., Int. J. Cancers
25 (Suppl.) 7:45-50 (1992).

[220] Various techniques for making and isolating BsAb fragments directly from recombinant cell culture have also been described. For example, bispecific F(ab')₂ heterodimers have been produced using leucine zippers. Kostelny et al., J. Immunol., 148(5):1547-1553 (1992). The leucine zipper peptides from the Fos and Jun proteins are
30 linked to the Fab' portions of two different antibodies by gene fusion. The antibody homodimers are reduced at the hinge region to form monomers and then re-oxidized to form the antibody heterodimers.

b. Antibody Purification

[221] **ANTIBODY PURIFICATION GENERALLY:**

[222] When using recombinant techniques, the antibody can be produced intracellularly, in the periplasmic space, or directly secreted into the medium. If the antibody is produced intracellularly, as a first step, the particulate debris, either host cells or lysed fragments, is removed, for example, by centrifugation or ultrafiltration. Carter et al., *Bio/Technology* 10:163-167 (1992), describe a procedure for isolating antibodies which are secreted to the periplasmic space of *E. coli*. Briefly, cell paste is thawed in the presence of sodium acetate (pH 3.5), EDTA, and phenylmethylsulfonylfluoride (PMSF) over about 30 min. Cell debris can be removed by centrifugation. Where the antibody is secreted into the medium, supernatants from such expression systems are generally first concentrated using a commercially available protein concentration filter, for example, an Amicon or Millipore Pellicon ultrafiltration unit. A protease inhibitor such as PMSF may be included in any of the foregoing steps to inhibit proteolysis and antibiotics may be included to prevent the growth of adventitious contaminants.

[223] **BEFORE LPHIC:**

[224] The antibody composition prepared from the cells is preferably subjected to at least one purification step prior to LPHIC. Examples of suitable purification steps include hydroxyapatite chromatography, gel electrophoresis, dialysis, and affinity chromatography. The suitability of protein A as an affinity ligand depends on the species and isotype of any immunoglobulin Fc domain that is present in the antibody. Protein A can be used to purify antibodies that are based on human $\gamma 1$, $\gamma 2$, or $\gamma 4$ heavy chains, Lindmark et al., *J. Immunol. Meth.* 62:1-13 (1983). Protein G has been recommended for mouse isotypes and for human $\gamma 3$, Guss et al., *E.M.B.O. J.*, 5:1567-1575 (1986). The matrix to which the affinity ligand is attached is often agarose, but other matrices are available. Mechanically stable matrices such as controlled pore glass or poly(styrenedivinyl)benzene allow for faster flow rates and shorter processing times than can be achieved with agarose. Where the antibody comprises a $C_H 3$ domain, the Bakerbond ABXTM resin (J. T. Baker, Phillipsburg, N.J.) is useful for purification. Other techniques for protein purification such as fractionation on an ion-exchange column, ethanol precipitation, Reverse Phase HPLC, chromatography on silica, chromatography on heparin SEPHAROSETM, chromatography on an anion or cation

exchange resin (such as a polyaspartic acid column), chromatofocusing, SDS-PAGE, and ammonium sulfate precipitation are also available depending on the antibody to be recovered.

[225] LPHIC:

[226] Following any preliminary purification step(s), the mixture comprising the antibody of interest and contaminant(s) can be subjected to LPHIC. See US Patent No. 6,214,984. Often, the antibody composition to be purified will be present in a buffer from the previous purification step. However, it may be necessary to add a buffer to the antibody composition prior to the LPHIC step. Many buffers are available and can be selected by routine experimentation. The pH of the mixture comprising the antibody to be purified and at least one contaminant in a loading buffer is adjusted to a pH of about 2.5-4.5 using either an acid or base, depending on the starting pH. The loading buffer can have a low salt concentration (e.g., less than about 0.25 M salt).

[227] The mixture is loaded on the HIC column. HIC columns normally comprise a base matrix (e.g., cross-linked agarose or synthetic copolymer material) to which hydrophobic ligands (e.g., alkyl or aryl groups) are coupled. One example of an HIC column comprises an agarose resin substituted with phenyl groups (e.g., a Phenyl SEPHAROSE™ column). Many HIC columns are available commercially. Examples include, but are not limited to, Phenyl SEPHAROSE 6 FAST FLOW™ column with low or high substitution (Pharmacia LKB Biotechnology, AB, Sweden); Phenyl SEPHAROSE™ High Performance column (Pharmacia LKB Biotechnology, AB, Sweden); Octyl SEPHAROSE™ High Performance column (Pharmacia LKB Biotechnology, AB, Sweden); FRACTOGEL™ EMD Propyl or FRACTOGEL™ EMD Phenyl columns (E. Merck, Germany); MACRO-PREP™ Methyl or MACRO-PREP™ t-Butyl Supports (Bio-Rad, California); WP HI-Propyl (C₃)™ column (J. T. Baker, New Jersey); and TOYOPEARL™ ether, phenyl, or butyl columns (TosoHaas, PA).

[228] The antibody is typically eluted from the column using an elution buffer that is the same as the loading buffer. The elution buffer can be selected using routine experimentation in view of the present application. The pH of the elution buffer may be between about 2.5-4.5 and have a low salt concentration (e.g., less than about 0.25 M salt). It may not be necessary to use a salt gradient to elute the antibody of interest; the desired product may be recovered in the flow-through fraction that does not bind significantly to the column.

[229] The LPHIC step provides a way to remove a correctly folded and disulfide bonded antibody from unwanted contaminants (*e.g.*, incorrectly associated light and heavy fragments). The method can provide an approach to substantially remove an impurity characterized as a correctly folded antibody fragment whose light and heavy chains fail to associate through disulfide bonding. Antibody compositions prepared using LPHIC can be up to about 95% pure or more. Purities of more than about 98% have been reported. US Patent No. 6,214,984.

[230] **POST LPHIC:**

[231] Antibody compositions prepared by LPHIC can be further purified as desired using techniques which are well known in the art. Diagnostic or therapeutic formulations of the purified protein can be made by providing the antibody composition in a physiologically acceptable carrier, examples of which are provided below. To remove contaminants (*e.g.*, unfolded antibody and incorrectly associated light and heavy fragments) from the HIC column so that it can be re-used, a composition including urea (*e.g.*, 6.0 M urea, 1% MES buffer pH 6.0, 4 mM ammonium sulfate) can be flowed through the column.

c. Some Uses For Antibodies Described Herein

(i) Generally

[232] **GENERALLY:**

[233] The present invention comprises any suitable use for the antibodies and other binding partners discussed herein. The following provides some of the desired uses, including diagnostic and therapeutic uses. Various diagnostic and therapeutic uses for antibodies have been reviewed in Goldenberg et al., *Semin. Cancer Biol.*, 1(3):217-225 (1990); Beck et al., *Semin. Cancer Biol.*, 1(3):181-188 (1990); Niman, *Immunol. Ser.* 53:189-204 (1990); and, Endo, *Nippon Igaku Hoshasen Gakkai Zasshi (Japan)* 50(8):901-909 (1990), for example.

[234] **ASSAYS:**

[235] The antibodies can be used in immunoassays, such as enzyme immunoassays. BsAbs can be useful for this type of assay; one arm of the BsAb can be designed to bind to a specific epitope on the enzyme so that binding does not cause enzyme inhibition, the other arm of the antibody can be designed to bind to an immobilizing matrix ensuring a high enzyme density at the desired site. Examples of such diagnostic BsAbs include those having

specificity for IgG as well as ferritin, and those having binding specificities for horseradish peroxidase (HRP) as well as a hormone, for example. Monoclonal and polyclonal antibodies are also exemplary antibodies for immunoassays.

[236] The antibodies can be designed for use in two-site immunoassays. For example, two antibodies are produced binding to two separate epitopes on the analyte protein; one antibody binds the complex to an insoluble matrix, the other binds an indicator enzyme.

[237] **DIAGNOSTIC USES:**

[238] Antibodies can also be used for immunodiagnosis, *in vitro* or *in vivo* or otherwise, of various diseases or conditions based on the presence or absence of a particular GPCR. Such diseases and conditions include, *e.g.*, immune-related diseases, cell growth-related diseases, cell regeneration-related diseases, immunological-related cell proliferative diseases, and autoimmune diseases. Examples of specific diseases include AIDS, allergies, Alzheimer's disease, amyotrophic lateral sclerosis, atherosclerosis, bacterial, fungal, protozoan and viral infections, benign prostatic hypertrophy, bone diseases (*e.g.*, osteoarthritis, osteoporosis), carcinoma (*e.g.*, basal cell carcinoma, breast carcinoma, embryonal carcinoma, ovarian carcinoma, renal cell carcinoma, lung adenocarcinoma, lung small cell carcinoma, pancreatic carcinoma, prostate carcinoma, transitional carcinoma of the bladder, squamous cell carcinoma, thyroid carcinoma), cardiomyopathy, chronic and acute inflammation, circadian rhythm disorders, COPD, Crohn's disease, diabetes, Duchenne muscular dystrophy, embryonal carcinoma, endotoxic shock, environmental stress (*e.g.*, by heat, UV or chemicals), gastrointestinal disorders, glioblastoma multiform, graft vs. host disease, Hodgkin's disease, inflammatory bowel disease, ischemia, stroke, lymphoma, macular degeneration, malignant cytokine production, malignant fibrous histiocytoma, melanoma, meningioma, mesothelioma, multiple sclerosis, nasal congestion, pain, Parkinson's disease, prostate carcinoma, psoriasis, rhabdomyosarcoma, psychotic or neurological disorders (*e.g.*, anxiety, depression, schizophrenia, dementia, mental retardation, memory loss, epilepsy, locomotor problems, respiratory disorders, asthma, eating/body weight disorders including obesity, bulimia, diabetes, anorexia, nausea, hypertension, hypotension), renal disorders, reperfusion injury, rheumatoid arthritis, sarcoma (*e.g.*, chondrosarcoma, Ewing's sarcoma, osteosarcoma), septicemia, seminoma, sexual/reproductive disorders, tonsil, transitional carcinoma of the bladder, transplant rejection, trauma, tuberculosis, ulcers, ulcerative colitis, urinary retention, vascular and

cardiovascular disorders, or any other disease or disorder in which G protein-coupled receptors are involved, as well as learning and/or memory disorders, diabetes, pain perception disorders, anorexia, obesity, hormonal release problems, or any other disease or disorder in which a specific GPCR is involved.

- 5 [239] To facilitate this diagnostic use, an antibody that binds a particular GPCR, when such is differentially expressed in tumors or other target diseases, can be conjugated with a detectable marker (*e.g.*, a chelator that binds a radionuclide). Examples of tumor-associated antigens being used in a similar fashion include an antibody having specificity for the tumor-associated antigen CEA used for imaging colorectal and thyroid carcinomas and the anti-
10 p185^{HER2} antibody used for detecting cancers characterized by amplification of the HER2 protooncogene. Other uses for the antibodies of the present invention will be apparent to the skilled practitioner in view of the present application.

(ii) Assays

15 [240] ASSAYS:

[241] For certain applications such as some diagnostic and other assay applications, the antibody typically can be labeled directly or indirectly with a detectable moiety. The detectable moiety can be any moiety that is capable of producing, either directly or indirectly, a detectable signal. For example, the detectable moiety may be a radioisotope, such as ³H,
20 ¹⁴C, ³²P, ³⁵S, or ¹²⁵I; a fluorescent or chemiluminescent compound, such as fluorescein isothiocyanate, rhodamine, or luciferin; or an enzyme, such as alkaline phosphatase, beta-galactosidase, or HRP.

[242] Any method known in the art for separately conjugating the antibody to the detectable moiety may be employed, including those methods described by Hunter et al.,
25 Nature, 144:945 (1962); David et al., Biochemistry, 13:1014 (1974); Pain et al., J. Immunol. Meth. 40:219 (1981); and, Nygren, J. Histochem. and Cytochem. 30:407 (1982).

[243] The antibodies of the present invention may be employed in any desired assay method, such as competitive binding assays, direct, and indirect sandwich assays, and immunoprecipitation assays. Zola, Monoclonal Antibodies: A Manual of Techniques, pp.
30 147-158 (CRC Press, Inc. (1987)).

[244] COMPETITIVE BINDING ASSAYS:

[245] Competitive binding assays rely on the ability of a labeled standard to compete with the test sample analyte for binding with a limited amount of antibody. The amount of analyte in the test sample is inversely proportional to the amount of standard that becomes bound to the antibody. To facilitate determining the amount of standard that becomes bound, the antibody generally is insolubilized before or after the competition, so that the standard, and analyte that are bound to the antibody may conveniently be separated from the standard, and analyte which remain unbound.

[246] BsAbs are particularly useful for sandwich assays which involve the use of two molecules, each capable of binding to a different immunogenic portion, or epitope, of the sample to be detected. In a sandwich assay, the test sample analyte is bound by a first arm of the antibody which is immobilized on a solid support, and thereafter a second arm of the antibody binds to the analyte, thus forming an insoluble three part complex. *See, e.g.,* U.S. Pat. No. 4,376,110. The second arm of the antibody may itself be labeled with a detectable moiety (direct sandwich assays) or may be measured using an anti-immunoglobulin antibody that is labeled with a detectable moiety (indirect sandwich assay). For example, one type of sandwich assay is an ELISA assay, in which case the detectable moiety is an enzyme. Assays are discussed further elsewhere herein in relation to binding partners such as antibodies, and antigenic peptides for particular GPCRs, including assays searching for or using such antigenic peptides, and would be apparent to those skilled in the art in view of the present application.

(iii) Affinity Purification

[247] AFFINITY PURIFICATION:

[248] The antibodies also are useful for the affinity purification of an antigen of interest such as a particular GPCR from sources such as recombinant cell culture or natural sources.

(iv) Therapeutics

[249] THERAPEUTIC USES:

[250] Therapeutic compositions, and uses, etc., for the antibodies described herein will now be discussed. As with other parts of this application, this section does not contain the entire discussion of therapeutic uses or compositions, etc., for antibodies; other sections discuss both antibodies, and therapeutics, and the discussion in this section applies to certain

other aspects discussed herein. Turning to antibodies and therapeutics, the antibodies can be used, for example, for redirected cytotoxicity (e.g., to kill tumor cells), as a vaccine adjuvant, for delivering thrombolytic agents to clots, for delivering immunotoxins to tumor cells, for converting enzyme activated prodrugs at a target site (e.g., a tumor), for treating infectious diseases or targeting immune complexes to cell surface receptors.

[251] THERAPEUTIC FORMULATIONS:

[252] Therapeutic formulations of the antibody can be prepared for storage by mixing the antibody having the desired degree of purity with optional physiologically acceptable carriers, excipients, or stabilizers (Remington's Pharmaceutical Sciences, 16th edition, Osol, A., Ed. (1980), for example in the form of lyophilized cake or aqueous solutions. Acceptable carriers, excipients, or stabilizers are nontoxic to recipients at the dosages, and concentrations employed, and include buffers such as phosphate, citrate, and other organic acids; antioxidants including ascorbic acid; low molecular weight (less than about 10 residues) polypeptides; proteins, such as serum albumin, gelatin, or immunoglobulins; hydrophilic polymers such as polyvinylpyrrolidone; amino acids such as glycine, glutamine, asparagine, arginine, or lysine; monosaccharides, disaccharides, and other carbohydrates including glucose, mannose, or dextrans; chelating agents such as EDTA; sugar alcohols such as mannitol or sorbitol; salt-forming counterions such as sodium; or nonionic surfactants such as Tween, Pluronic, or polyethylene glycol (PEG).

[253] The antibodies also may be entrapped in microcapsules prepared, for example, by coacervation techniques or by interfacial polymerization (for example, hydroxymethylcellulose or gelatin-microcapsules, and poly-[methylmethacrylate] microcapsules, respectively), in colloidal drug delivery systems (for example, liposomes, albumin microspheres, microemulsions, nano-particles, and nanocapsules), or in macroemulsions. Such techniques are disclosed in Remington's Pharmaceutical Sciences, *supra*.

[254] THERAPEUTIC FORMULATIONS -STERILE:

[255] An antibody to be used for *in vivo* human administration should be sterile. This can be accomplished by filtration through sterile filtration membranes, for example prior to or following lyophilization and reconstitution. The antibody ordinarily will be stored in lyophilized form or in solution. Therapeutic antibody compositions generally are placed into

a container having a sterile access port, for example, an intravenous solution bag or vial having a stopper pierceable by a hypodermic injection needle.

[256] THERAPEUTIC ADMINISTRATIONS:

[257] The route of antibody administration is in accord with known methods, *e.g.*,
5 injection or infusion by intravenous, intraperitoneal, intracerebral, intramuscular, intraocular, intraarterial, or intralesional routes, or by sustained release systems as noted below.

[258] The antibody can be administered, for example, continuously by infusion or by bolus injection. Suitable examples of sustained-release preparations include semipermeable matrices of solid hydrophobic polymers containing the protein, which matrices are in the
10 form of shaped articles, *e.g.*, films, or microcapsules. Examples of sustained-release matrices include polyesters, hydrogels (*e.g.*, poly(2-hydroxyethyl-methacrylate) as described by Langer et al., J. Biomed. Mater. Res., 15:167-277 (1981), and Langer, Chem. Tech., 12:98-105 (1982), or poly(vinylalcohol)), polylactides, U.S. Pat. No. 3,773,919; EP 58,481, copolymers of L-glutamic acid and gamma ethyl-L-glutamate, Sidman et al., Biopolymers,
15 22:547-556 (1983), non-degradable ethylene-vinyl acetate, Langer et al., *supra*, degradable lactic acid-glycolic acid copolymers such as the LUPRON DEPOT™ (injectable microspheres composed of lactic acid-glycolic acid copolymer and leuprolide acetate), and poly-D-(-)-3-hydroxybutyric acid, EP 133,988.

[259] THERAPEUTIC ADMINISTRATIONS - SUSTAINED RELEASE-POLYMERS:
20

[260] While polymers such as ethylene-vinyl acetate and lactic acid-glycolic acid sustain release of molecules for over 100 days, certain hydrogels release proteins for shorter time periods. When encapsulated antibodies remain in the body for a long time, they may denature or aggregate as a result of exposure to moisture at 37°C, resulting in a loss of
25 biological activity and possible changes in immunogenicity. Rational strategies can be devised for antibody stabilization depending on the mechanism involved. For example, if the aggregation mechanism is discovered to be intermolecular S-S bond formation through thio-disulfide interchange, stabilization may be achieved by modifying sulfhydryl residues, lyophilizing from acidic solutions, controlling moisture content, using appropriate additives,
30 and developing specific polymer matrix compositions.

[261] THERAPEUTIC ADMINISTRATIONS - SUSTAINED RELEASE-LIPOSOMES:

[262] Sustained-release antibody compositions also include liposomally entrapped antibody. Liposomes containing the antibody can be prepared by methods such as those in DE 3,218,121; Epstein et al., Proc. Natl. Acad. Sci. USA, 82:3688-3692 (1985); Hwang et al., Proc. Natl. Acad. Sci. USA, 77:4030-4034 (1980); EP 52,322; EP 36,676; EP 88,046; EP 5 143,949; EP 142,641; Japanese patent application 83-118008; U.S. Pat. Nos. 4,485,045 and 4,544,545; and EP 102,324. Ordinarily the liposomes are of the small (about 200-800 Angstroms) unilamellar type in which the lipid content is greater than about 30 mol. % cholesterol, the selected proportion being adjusted for the optimal antibody therapy.

[263] **THERAPEUTICALLY EFFECTIVE AMOUNT:**

10 [264] An effective amount of antibody to be employed therapeutically will depend, for example, upon the therapeutic objectives, the route of administration, and the condition of the patient. Accordingly, it will be necessary for the therapist to titer the dosage and modify the route of administration as required to obtain the optimal therapeutic effect. A typical daily dosage might range from about 1 µg/kg to up to 10 mg/kg or more, depending on the factors 15 mentioned above. Typically, the clinician will administer antibody until a dosage is reached that achieves the desired effect. The progress of this therapy is easily monitored by conventional assays.

20 5. **DRUG DESIGN BASED ON THE ANTIGENS HEREIN OR ANTIBODIES THERETO**

[265] **DISEASE/CONDITIONS LIST:**

[266] The peptides and antibodies of the present invention can serve as valuable tools for designing drugs for treating various pathophysiological conditions such as immune-related diseases, cell growth-related diseases, cell regeneration-related diseases, immunological- 25 related cell proliferative diseases, and autoimmune diseases. Examples of specific diseases include AIDS, allergies, Alzheimer's disease, amyotrophic lateral sclerosis, atherosclerosis, bacterial, fungal, protozoan and viral infections, benign prostatic hypertrophy, bone diseases (e.g., osteoarthritis, osteoporosis), carcinoma (e.g., basal cell carcinoma, breast carcinoma, embryonal carcinoma, ovarian carcinoma, renal cell carcinoma, lung adenocarcinoma, lung 30 small cell carcinoma, pancreatic carcinoma, prostate carcinoma, transitional carcinoma of the bladder, squamous cell carcinoma, thyroid carcinoma), cardiomyopathy, chronic and acute inflammation, circadian rhythm disorders, COPD, Crohn's disease, diabetes, Duchenne

muscular dystrophy, embryonal carcinoma, endotoxic shock, environmental stress (*e.g.*, by heat, UV or chemicals), gastrointestinal disorders, glioblastoma multiform, graft vs. host disease, Hodgkin's disease, inflammatory bowel disease, ischemia, stroke, lymphoma, macular degeneration, malignant cytokine production, malignant fibrous histiocytoma, melanoma, meningioma, mesothelioma, multiple sclerosis, nasal congestion, pain, Parkinson's disease, prostate carcinoma, psoriasis, rhabdomyosarcoma, psychotic or neurological disorders (*e.g.*, anxiety, depression, schizophrenia, dementia, mental retardation, memory loss, epilepsy, locomotor problems, respiratory disorders, asthma, eating/body weight disorders including obesity, bulimia, diabetes, anorexia, nausea, hypertension, hypotension), renal disorders, reperfusion injury, rheumatoid arthritis, sarcoma (*e.g.*, chondrosarcoma, Ewing's sarcoma, osteosarcoma), septicemia, seminoma, sexual/reproductive disorders, tonsil, transitional carcinoma of the bladder, transplant rejection, trauma, tuberculosis, ulcers, ulcerative colitis, urinary retention, vascular and cardiovascular disorders, or any other disease or disorder in which G protein-coupled receptors are involved, as well as learning and/or memory disorders, diabetes, pain perception disorders, anorexia, obesity, hormonal release problems, or any other disease or disorder in which a specific GPCR is involved or that would be readily apparent to those skilled in the art in view of the present application.

EXAMPLES

[267] The Examples below provide information as follows: Example 1 relates to the identification and selection of the antigens set forth in Figure 2. Examples 2 to 4 relate to antibody production and purification based on such antigens. Examples 5 to 10 relate to H&E staining. And, Example 11 relates to Western blot analyses.

EXAMPLE 1: SELECTION OF ANTIGENS

[268] Antigenic peptides were derived from the amino acid sequence of a particular GPCR based on analyses of likely antigen-containing regions and specificity of those regions for the protein/gene of interest. The specificity of the antigen peptides (approximately 20 amino acids in length) for antibody generation was determined using the outlined techniques, including BLAST of several public databases. These public databases included but were not limited to GenBank, Swiss Prot Human, Swiss Prot NonHuman, GenPeptH, GenPept M, and

LifeSpan's proprietary databases. With respect to specificity, parameters that precluded the use of a particular peptide included the presence of 6 or more contiguous amino acids with sequence identity to protein(s) other than the protein of interest, the presence of sites of posttranslational modification, including phosphorylation and glycosylation, and highly hydrophobic sequences, which could indicate potential *in situ* localization within the plasma membrane. The peptides were analyzed for antigenicity using the published algorithm of Hopp, T. P., and Woods, K. R, Proc. Natl. Acad. Sci. U.S.A. 78, 3824-3828, (1981). Additional considerations in antigenic peptide design included 1) selection against sequences with multiple prolines in a row, 2) selection against sequences with multiple serines in a row, 3) selection against sequences with multiple lysines in a row, 4) selection against sequences with multiple arginines in a row 5) selection against sequences with multiple aspartic acids in a row, 6) selection against sequences with multiple glutamic acids in a row, 7) selection against peptides containing methionine or tryptophan, which can become oxidized as a result of the cyclization reaction, and 8) avoidance of stretches of 5 or more amino acids having no uncharged amino acids (which also resulted in a desirable charge to peptide length ratio of at least 1 charge:5 residues). The selected antigenic peptides are set forth in the Sequence Listing and in Figure 2.

EXAMPLE 2: ANTIBODY PRODUCTION SCHEDULE

- [269] Day 0 - Pre-immune serum collection (approximately 5.0 ml). Immunize using 200 µg antigen peptide per rabbit in Complete Freund's Adjuvant.
- [270] Day 14 - Immunize using 100 µg antigen per rabbit in Incomplete Freund's Adjuvant.
- [271] Day 28 - Immunize using 100 µg antigen per rabbit in Incomplete Freund's Adjuvant.
- [272] Day 42 - Immunize using 100 µg antigen per rabbit in Incomplete Freund's Adjuvant.
- [273] Day 49 - First production bleed; obtain 24.0 - 26.0 ml.
- [274] Day 56 - Immunize using 100 µg antigen per rabbit in Incomplete Freund's Adjuvant.
- [275] Day 63 - Second production bleed and ELISA analysis.

[276] Day 70 - Immunize using 100 µg antigen per rabbit in Incomplete Freund's Adjuvant.

[277] Day 77 - Third production bleed and affinity purification.

5 EXAMPLE 3: IMMUNOSORBENT PURIFICATION OF ANTISERUM:
 COUPLING OF PEPTIDE TO CNBR-ACTIVATED SEPHAROSE 4B

[278] Weigh out 0.8 g of CNBr-activated Sepharose 4B (2.5 ml of final gel volume). Wash and re-swell on sintered glass filter with 1 mM HCl, followed by coupling buffer (0.1 M NaHCO₃, 0.25 M NaCl, pH 8.5). Dissolve 10 mg of protein or peptide in coupling buffer.
10 Mix protein solution with gel suspension and incubate 2 hours at room temperature or overnight at 4°C. Block remaining active groups with 0.2 M glycine buffer, pH 8.1. Wash away excess adsorbed protein with coupling buffer, followed by 0.1 M acetate buffer containing 0.5 M NaCl, pH 4.3. Equilibrate the column with phosphate-buffered saline (PBS), pH 7.7.

15 EXAMPLE 4: IMMUNOSORBENT PURIFICATION OF ANTISERUM:
 AFFINITY PURIFICATION OF ANTISERUM

[279] Dilute 10 ml of clear antiserum 1:1 with PBS, pH 7.7, apply to affinity column at a flow rate of 0.3 ml/minute, and monitor absorbance of eluate at 280 nm. Collect fractions of
20 unbound material and rinse column with PBS, pH 7.7. Elute bound antibody with 0.2 M glycine, pH 1.85, and collect eluate until absorbance at 280 nm returns to baseline. Neutralize all collected fractions with 1 M Tris-HCl, pH 8.5 immediately after collection. Determine OD at 280 nm, and determine the total OD recovered. Conduct ELISA analysis with the corresponding antigen to confirm the presence and identity of recovered antibody
25 and the removal of all antibody from the original serum. Concentrate antibody to approximately 2.0 mg/ml and dialyze against PBS with 0.01% NaN₃.

 EXAMPLE 5: PREPARATION OF ANTIBODY DILUTIONS

[280] The purpose of this protocol is to dilute antibodies in solution. Materials include
30 Tris-HCL Buffer with carrier protein and 0.015 M NaN₃ (Dako Antibody Diluent #S0809 (DAKO, Carpinteria, CA); vials containing the antibodies described above or commercial antibodies against the particular GPCR; pipetmen and disposable tips; container of chopped ice; 12 ml Dako reagent tubes; and, reagent tube rack.

[281] The procedure is a) calculate proportions of antibody and diluent according to desired concentrations and volume requirements; b) label reagent tubes and place in rack; c) pipette needed volume of diluent into tube(s); d) place vials of antibodies into ice; e) invert and/or flick antibody vial(s) 3 or 4 times to insure suspension; f) pipette required volume of antibody(s) into corresponding diluent volumes; and, g) mix gently.

EXAMPLE 6: PREPARATION OF AUTOSTAINER SOLUTIONS

[282] The purpose of this protocol is the preparation of concentrated solutions for use in a DAKO autostainer. Materials include DAKO® TBST (Tris Buffered Saline Containing Tween-S3306), 10X Concentrate, DAKO® Target Retrieval Solution, 10x Concentrate (S1699), deionized H₂O, 20L container, with lid, marked at the 10L level, DAKO® TBS (Tris Buffered Saline-S1968), and DAKO Tween® (S1966).

[283] The procedure to make TBST 10x Concentrate is a) pour 2 500 ml bottles DAKO® TBST into a 20 L container, b) add deionized H₂O until solution level is at 10 L mark, c) replace lid and shake 10 to 20 times, d) pour diluted DAKO® TBST into autostainer carboy(s) as designated. The procedure to make Target Retrieval Solution is a) measure 135 ml of deionized H₂O and pour into slide bath, b) measure 15 ml of DAKO® Target Retrieval solution, c) add to H₂O, and d) agitate. This solution is then used in the steam method of target retrieval, Example 9, below. The procedure to make TBS is a) fill 20L container to 10L mark with deionized H₂O, b) add 2 envelopes of DAKO® TBS, c) add 5 ml of DAKO TWEEN®, and d) replace lid and agitate 10 to 20 times.

EXAMPLE 7: PREPARATION OF SOLUTIONS FOR ANTIBODY DETECTION

[284] Solutions for antibody detection are prepared using Vector® Biotinylated antibody (BA series), Vectastain® ABC-AP Kit (AK-5000), 10 mM sodium phosphate, pH 7.5, 0.9% saline (PBS), Vector® Red Alkaline Phosphatase Substrate Kit I (SK-5100), and 100 mM Tris-HCl, pH 8.2 Buffer. To prepare biotinylated antibody, add 10 ml of PBS to reagent tube, add 1 drop biotinylated antibody to the PBS, then mix gently. To prepare ABC, to 10 ml of PBS, add 2 drops each of Reagent A and Reagent B, mix immediately, then allow to stand 30 minutes before use. To prepare AP Red, which should be prepared immediately

before use, to 5 ml of Tris-HCl buffer, add 2 drops of Reagent 1 and mix well, add 2 drops of Reagent 2 and mix well, then add 2 drops of Reagent 3 and mix well.

EXAMPLE 8: DEPARAFFINIZATION AND REHYDRATION OF SAMPLES

[285] The purpose of this protocol is to remove paraffin from and rehydrate preserved tissues in preparation for IHC procedures. Materials and equipment include fume hood, vertical slide rack(s), three xylene (VWR #72060-088) baths, three 100% alcohol blend (VWR #72060-050) baths, two 95% alcohol blend (VWR #72060-052) baths, one 70% alcohol blend (VWR #72060-056) bath, and Tris-Buffered Saline (DAKO® S1968) + Tween® (DAKO S1966).

[286] Insert the slides into the vertical rack(s). Move slides through baths inside fume hood as follows:

Xylene 5 Minutes
Xylene 5 Minutes
Xylene 5 Minutes
100% Alcohol 2 Minutes
100% Alcohol 2 Minutes
100% Alcohol 1 Minute
95% Alcohol 2 Minutes
95% Alcohol 2 Minutes
70% Alcohol 1 Minute

[287] Finally, place slides into a container with TBST.

EXAMPLE 9: STEAM METHOD OF TARGET RETRIEVAL

[288] The purpose of this protocol is to optimize antibody binding within paraffin embedded tissues. Materials and equipment included a steamer, deionized H₂O, target retrieval solution, 10X concentrate (DAKO #S1699), 250 ml graduated cylinder, 15 ml graduated cylinder, staining dish(es), and deparaffinized and rehydrated tissue on microscope slides in immersed TBST. The procedure is to a) fill the steamer with deionized H₂O to appropriate depth as indicated, b) turn the steamer on, c) in a graduated cylinder, measure 135ml of deionized H₂O and pour into staining dish(es), d) pipette 15ml of target retrieval solution and release into deionized H₂O, e) place the staining dish(es) into the basket of the steamer and heat for at least 10 minutes to preheat, f) add rack(s) containing tissue slides to heated target retrieval solution, g) cover and steam for 20 minutes, h) remove container from

steamer and let stand at room temperature for 20 minutes, i) transfer rack(s) with slides to container(s) of TBST, and j) slides are now ready for staining procedures.

EXAMPLE 10: ANTIBODY DETECTION

- 5 [289] The deparaffinized, rehydrated, and steamed (if needed) slides are loaded onto racks within a DAKO autostainer and then the autostainer is run according to the manufacturer's instructions. The slides are removed and the autostainer is turned off.

EXAMPLE 11: WESTERN BLOTTING

- 10 [290] The purpose of this protocol is to visualize the immunoreactivity of the antibodies described above against the particular GPCR on a western blot. Materials and equipment included western blot membrane, TBS Tween (TBST: 100 mM Tris-HCl pH 7.5, 150 mM NaCl, 0.1% TweenTM 20), 5% non-fat dried milk in TBST (blotto), antibody of interest (primary), peroxidase-conjugated AffiniPure goat anti-rabbit IgG (H+L) (secondary) –
- 15 Jackson ImmunoResearch, ECL solution (Amersham Biosciences, Uppsala Sweden), film, developer D-19, fixer, rocking platform.
- [291] During the blotting procedure, the blot is kept wet at all times and on a substantially level surface. The Western blot is placed right-side up in 10 ml of blotto. The membrane is flipped over and the dish rocked so that the solution covered it. The membrane is then
- 20 flipped back to the right side and solution is again rocked over it. The blot is then placed on a shaker for at least 1 hour. Ten ml of primary antibody are prepared by diluting 1:500 in blotto.
- [292] The blotto is removed from the Western blot and replaced with the primary antibody. The blot is flipped again and placed on the shaker for 1 hour. Secondary antibody
- 25 and peroxidase-conjugated AffiniPure goat anti-rabbit IgG (H+L) are prepared 1:20,000 in 10 ml of blotto. The primary antibody is removed and the Western blot is washed 3 times with 10 ml of blotto. The blotto is removed and replaced with the secondary antibody solution. The blot is flipped and placed on the shaker for 1 hour. The secondary antibody is removed and the blot washed 2 times with 10 ml of blotto. The blotto is removed and the blot is
- 30 washed 2 times with 10 ml TBST. ECL is prepared by combining equal amounts of Solution 1 and 2.

[293] The blotto is removed and 1 ml of ECL is placed on the blot. The blot is flipped and let sit for 1 minute. The blot is placed on plastic wrap and immediately covered with plastic wrap. The ECL is pressed out. The blot is placed on the film, then the film is developed.

5

[294] From the foregoing, it will be appreciated that, although specific embodiments of the invention have been described herein for purposes of illustration, various modifications may be made without deviating from the spirit and scope of the invention. Accordingly, the invention includes all permutations and combinations of the subject matter set forth herein
10 and is not limited except as by the appended claims.

WHAT IS CLAIMED IS:

1. An isolated antigenic peptide according to any one of SEQ ID NOS. 692-2292.
- 5 2. An isolated antigenic peptide comprising an amino acid sequence that is at least about 90% identical to a sequence set forth in any one of SEQ ID NOS. 692-2292.
3. An isolated antigenic peptide that is an analog of an antigenic peptide according to any one of SEQ ID NOS. 692-2292.
4. An isolated antigenic peptide comprising a short antigenic amino acid
10 sequence that is identical to at least 5 consecutive amino acids set forth in any one of SEQ ID NOS. 692-2292.
5. An isolated antigenic peptide comprising a short antigenic amino acid sequence that is identical to or contains no more than one conservative amino acid substitution over at least 7 consecutive amino acids set forth in any one of SEQ ID NOS. 692-
15 2292.
6. A kit for the detection of antibodies against a particular GPCR in a sample comprising:
 - a) an isolated antigenic peptide according to any one of claims 1-5 and derived from the particular GPCR, and
 - 20 b) at least one of a reagent or a device for detecting the antibodies.
7. An isolated antibody having high specificity and high affinity or avidity for a particular GPCR comprising a peptide sequence that is identical to any one of SEQ ID NOS. 692-703, 713-730, 744-802, 807-820, 825-875, 880-889, 917-941, 950-964, 971-984, 989-993, 1010-1013, 1021-1024, 1029-1043, 1049-1052, 1057-1072, 1087-1113, 1124-1151,
25 1161-1172, 1179-1187, 1198-1209, 1228-1231, 1245-1257, 1271-1279, 1304-1308, 1369-1372, wherein the antibody was produced using an isolated antigenic peptide comprising the peptide sequence that is identical to the any one of SEQ ID NOS. 692-703, 713-730, 744-802, 807-820, 825-875, 880-889, 917-941, 950-964, 971-984, 989-993, 1010-1013, 1021-1024, 1029-1043, 1049-1052, 1057-1072, 1087-1113, 1124-1151, 1161-1172, 1179-1187,
30 1198-1209, 1228-1231, 1245-1257, 1271-1279, 1304-1308, 1369-1372.
8. An isolated antibody having high specificity and high affinity or avidity for a particular GPCR comprising a peptide sequence that is at least about 90% identical to any

one of SEQ ID NOS. 692-703, 713-730, 744-802, 807-820, 825-875, 880-889, 917-941, 950-964, 971-984, 989-993, 1010-1013, 1021-1024, 1029-1043, 1049-1052, 1057-1072, 1087-1113, 1124-1151, 1161-1172, 1179-1187, 1198-1209, 1228-1231, 1245-1257, 1271-1279, 1304-1308, 1369-1372, wherein the antibody was produced using the peptide sequence that is
5 at least about 90% identical to the any one of SEQ ID NOS. 692-703, 713-730, 744-802, 807-820, 825-875, 880-889, 917-941, 950-964, 971-984, 989-993, 1010-1013, 1021-1024, 1029-1043, 1049-1052, 1057-1072, 1087-1113, 1124-1151, 1161-1172, 1179-1187, 1198-1209, 1228-1231, 1245-1257, 1271-1279, 1304-1308, 1369-1372.

9. An isolated antibody having high specificity and high affinity or avidity for a
10 particular GPCR comprising a peptide sequence that is an analog to any one of SEQ ID NOS. 692-703, 713-730, 744-802, 807-820, 825-875, 880-889, 917-941, 950-964, 971-984, 989-993, 1010-1013, 1021-1024, 1029-1043, 1049-1052, 1057-1072, 1087-1113, 1124-1151, 1161-1172, 1179-1187, 1198-1209, 1228-1231, 1245-1257, 1271-1279, 1304-1308, 1369-1372, wherein the antibody was produced using an isolated antigenic peptide comprising the
15 peptide sequence that is the analog to the any one of SEQ ID NOS. 692-703, 713-730, 744-802, 807-820, 825-875, 880-889, 917-941, 950-964, 971-984, 989-993, 1010-1013, 1021-1024, 1029-1043, 1049-1052, 1057-1072, 1087-1113, 1124-1151, 1161-1172, 1179-1187, 1198-1209, 1228-1231, 1245-1257, 1271-1279, 1304-1308, 1369-1372.

10. An isolated antibody having high specificity and high affinity or avidity for a
20 particular GPCR comprising a peptide sequence that is identical to at least 5 consecutive amino acids set forth any one of SEQ ID NOS. 692-703, 713-730, 744-802, 807-820, 825-875, 880-889, 917-941, 950-964, 971-984, 989-993, 1010-1013, 1021-1024, 1029-1043, 1049-1052, 1057-1072, 1087-1113, 1124-1151, 1161-1172, 1179-1187, 1198-1209, 1228-1231, 1245-1257, 1271-1279, 1304-1308, 1369-1372, wherein the antibody was produced
25 using a short isolated antigenic peptide comprising the at least 5 consecutive amino acids set forth in the any one of SEQ ID NOS. 692-703, 713-730, 744-802, 807-820, 825-875, 880-889, 917-941, 950-964, 971-984, 989-993, 1010-1013, 1021-1024, 1029-1043, 1049-1052, 1057-1072, 1087-1113, 1124-1151, 1161-1172, 1179-1187, 1198-1209, 1228-1231, 1245-1257, 1271-1279, 1304-1308, 1369-1372.

30 11. An isolated antibody specific for a particular GPCR comprising a peptide sequence that is identical to any one of SEQ ID NOS. 704-712, 731-743, 774-777, 803-806, 821-824, 876-879, 890-916, 942-949, 965-970, 985-988, 994-1009, 1014-1020, 1025-1028,

1044-1048, 1053-1056, 1073-1086, 1114-1123, 1152-1160, 1173-1178, 1188-1197, 1210-1227, 1232-1244, 1258-1270, 1280-1303, 1309-1368, 1373-1377, 1386-1389, 1394-1402, 1462-1482, 1496-1525, 1542-1549, 1557-1563, 1583-1649, 1656-1679, 1684-1688, 1693-1732, 1744-1752, 1765-1839, 1846-1854, 1855-1866, 1871-1917, 1926-1941, 1952-1955, 5 1960-1980, 1985-2141, 2152-2165, and 2170-2292, wherein the antibody was produced using an isolated antigenic peptide comprising the peptide sequence that is identical to the any one of SEQ ID NOS. 704-712, 731-743, 774-777, 803-806, 821-824, 876-879, 890-916, 942-949, 965-970, 985-988, 994-1009, 1014-1020, 1025-1028, 1044-1048, 1053-1056, 1073-1086, 1114-1123, 1152-1160, 1173-1178, 1188-1197, 1210-1227, 1232-1244, 1258-1270, 10 1280-1303, 1309-1368, 1373-1377, 1386-1389, 1394-1402, 1462-1482, 1496-1525, 1542-1549, 1557-1563, 1583-1649, 1656-1679, 1684-1688, 1693-1732, 1744-1752, 1765-1839, 1846-1854, 1855-1866, 1871-1917, 1926-1941, 1952-1955, 1960-1980, 1985-2141, 2152-2165, and 2170-2292.

12. An isolated antibody specific for a particular GPCR comprising a peptide 15 sequence that is at least about 90% identical to any one of SEQ ID NOS. 704-712, 731-743, 774-777, 803-806, 821-824, 876-879, 890-916, 942-949, 965-970, 985-988, 994-1009, 1014-1020, 1025-1028, 1044-1048, 1053-1056, 1073-1086, 1114-1123, 1152-1160, 1173-1178, 1188-1197, 1210-1227, 1232-1244, 1258-1270, 1280-1303, 1309-1368, 1373-1377, 1386-1389, 1394-1402, 1462-1482, 1496-1525, 1542-1549, 1557-1563, 1583-1649, 1656-1679, 20 1684-1688, 1693-1732, 1744-1752, 1765-1839, 1846-1854, 1855-1866, 1871-1917, 1926-1941, 1952-1955, 1960-1980, 1985-2141, 2152-2165, and 2170-2292, wherein the antibody was produced using the peptide sequence that is at least about 90% identical to the any one of SEQ ID NOS. 704-712, 731-743, 774-777, 803-806, 821-824, 876-879, 890-916, 942-949, 965-970, 985-988, 994-1009, 1014-1020, 1025-1028, 1044-1048, 1053-1056, 1073-1086, 25 1114-1123, 1152-1160, 1173-1178, 1188-1197, 1210-1227, 1232-1244, 1258-1270, 1280-1303, 1309-1368, 1373-1377, 1386-1389, 1394-1402, 1462-1482, 1496-1525, 1542-1549, 1557-1563, 1583-1649, 1656-1679, 1684-1688, 1693-1732, 1744-1752, 1765-1839, 1846-1854, 1855-1866, 1871-1917, 1926-1941, 1952-1955, 1960-1980, 1985-2141, 2152-2165, and 2170-2292.

30 13. An isolated antibody specific for a particular GPCR comprising a peptide sequence that is an analog to any one of SEQ ID NOS. 704-712, 731-743, 774-777, 803-806, 821-824, 876-879, 890-916, 942-949, 965-970, 985-988, 994-1009, 1014-1020, 1025-1028,

1044-1048, 1053-1056, 1073-1086, 1114-1123, 1152-1160, 1173-1178, 1188-1197, 1210-1227, 1232-1244, 1258-1270, 1280-1303, 1309-1368, 1373-1377, 1386-1389, 1394-1402, 1462-1482, 1496-1525, 1542-1549, 1557-1563, 1583-1649, 1656-1679, 1684-1688, 1693-1732, 1744-1752, 1765-1839, 1846-1854, 1855-1866, 1871-1917, 1926-1941, 1952-1955, 5 1960-1980, 1985-2141, 2152-2165, and 2170-2292, wherein the antibody was produced using an isolated antigenic peptide comprising the peptide sequence that is the analog to the any one of SEQ ID NOS. 704-712, 731-743, 774-777, 803-806, 821-824, 876-879, 890-916, 942-949, 965-970, 985-988, 994-1009, 1014-1020, 1025-1028, 1044-1048, 1053-1056, 1073-1086, 1114-1123, 1152-1160, 1173-1178, 1188-1197, 1210-1227, 1232-1244, 1258-1270, 10 1280-1303, 1309-1368, 1373-1377, 1386-1389, 1394-1402, 1462-1482, 1496-1525, 1542-1549, 1557-1563, 1583-1649, 1656-1679, 1684-1688, 1693-1732, 1744-1752, 1765-1839, 1846-1854, 1855-1866, 1871-1917, 1926-1941, 1952-1955, 1960-1980, 1985-2141, 2152-2165, and 2170-2292.

14. An isolated antibody specific for a particular GPCR comprising a peptide 15 sequence that is identical to at least 5 consecutive amino acids set forth any one of SEQ ID NOS. 704-712, 731-743, 774-777, 803-806, 821-824, 876-879, 890-916, 942-949, 965-970, 985-988, 994-1009, 1014-1020, 1025-1028, 1044-1048, 1053-1056, 1073-1086, 1114-1123, 1152-1160, 1173-1178, 1188-1197, 1210-1227, 1232-1244, 1258-1270, 1280-1303, 1309-1368, 1373-1377, 1386-1389, 1394-1402, 1462-1482, 1496-1525, 1542-1549, 1557-1563, 20 1583-1649, 1656-1679, 1684-1688, 1693-1732, 1744-1752, 1765-1839, 1846-1854, 1855-1866, 1871-1917, 1926-1941, 1952-1955, 1960-1980, 1985-2141, 2152-2165, and 2170-2292, wherein the antibody was produced using a short isolated antigenic peptide comprising the at least 5 consecutive amino acids set forth in the any one of SEQ ID NOS. 704-712, 731-743, 774-777, 803-806, 821-824, 876-879, 890-916, 942-949, 965-970, 985-988, 994-1009, 25 1014-1020, 1025-1028, 1044-1048, 1053-1056, 1073-1086, 1114-1123, 1152-1160, 1173-1178, 1188-1197, 1210-1227, 1232-1244, 1258-1270, 1280-1303, 1309-1368, 1373-1377, 1386-1389, 1394-1402, 1462-1482, 1496-1525, 1542-1549, 1557-1563, 1583-1649, 1656-1679, 1684-1688, 1693-1732, 1744-1752, 1765-1839, 1846-1854, 1855-1866, 1871-1917, 1926-1941, 1952-1955, 1960-1980, 1985-2141, 2152-2165, and 2170-2292.

30 15. A kit for the detection of antibodies against the particular GPCR of claim 5 comprising:

a) an isolated antibody according to any one of claims 7-14, and

- b) at least one of a reagent or a device for detecting the antibody.
16. An assay for the detection of a particular GPCR in a sample, comprising:
- a) providing an isolated antigenic peptide according to any one of claims 1-5,
- b) contacting the isolated antigenic peptide with the sample under conditions suitable
5 and for a time sufficient for the antigenic peptide to bind to one or more antibodies specific for the particular GPCR present in the sample, to provide an antibody-bound antigenic peptide, and
- c) detecting the antibody-bound antigenic peptide, and therefrom determining whether the sample contains the particular GPCR.
- 10 17. The assay of claim 16 further comprising the step of binding the isolated antigenic peptide or the antibody to a solid substrate.
18. The assay of claim 16 or 17 wherein the sample is an unpurified sample.
19. The assay of any one of claims 15-18 further comprising, prior to the contacting, obtaining the sample from a human being.
- 15 20. The assay of any one of claims 15-19 wherein the assay is selected from the group consisting of a countercurrent immuno-electrophoresis (CIEP) assay, a radioimmunoassay, a radioimmunoprecipitation, an enzyme-linked immuno-sorbent assay (ELISA), a dot blot assay, an inhibition or competition assay, a sandwich assay, an immunostick (dip-stick) assays, a simultaneous assay, an immunochromatographic assay, an
20 immunofiltration assay, a latex bead agglutination assay, an immunofluorescent assay, a biosensor assay, and a low-light detection assay.
21. An isolated nucleic acid molecule encoding an antigenic peptide according to any one of SEQ ID NOS. 692-2292.
22. The isolated nucleic acid molecule according to claim 21 wherein the
25 molecule encodes a naturally occurring human antigenic peptide.
23. An isolated nucleic acid molecule encoding an antigenic peptide that is at least about 90% identical to any one of the antigenic peptides set forth in SEQ ID NOS. 692-2292.
24. The isolated nucleic acid molecule according to claim 23 wherein the antigenic peptide is at least about 95% identical to the antigenic peptide.
- 30 25. The isolated nucleic acid molecule according to claim 23 or 24 wherein the molecule encodes a naturally occurring human antigenic peptide.

26. A process for producing an isolated polynucleotide comprising hybridizing a nucleotide encoding an antigenic peptide according to any one of SEQ ID NOS. 692-2292 to genomic DNA under highly stringent conditions and isolating the polynucleotide detected with the nucleotide.
- 5 27. A method of identifying an amino acid sequence for an antigenic peptide from a candidate polypeptide sequence wherein the antigenic peptide has a length of about 5 to about 100 amino acids, the method comprising:
- a) searching the candidate polypeptide sequence using a comparison window of the length, and
 - 10 b) selecting against amino acid sequences of the length and having at least 3 characteristics selected from the group consisting of 1) at least two consecutive prolines, 2) at least two consecutive serines, 3) at least two consecutive lysines, 4) at least two consecutive arginines, 5) at least two consecutive aspartic acids, 6) at least two consecutive glutamic acids, 7) methionine, 8) tryptophan, and 9) at least five consecutive amino acids comprising
 - 15 no charged amino acids.
28. The method of claim 27 wherein the method further comprises selecting against at least 5 of the characteristics.
29. The method of claim 27 wherein the method further comprises selecting against at least 7 of the characteristics.
- 20 30. The method of claim 27 wherein the method further comprises selecting against the 9 characteristics.
31. The method of any one of claims 27-30 wherein the method further comprises:
- c) selecting against amino acid sequences of the length and having at least one of the following additional characteristics 1) sequences having at least 5 consecutive amino
 - 25 acids that are identical to an alternative amino acid sequence from an alternative polypeptide that is different from the candidate polypeptide, 2) posttranslational modification sites, and 3) highly hydrophobic sequences.
32. The method of claim 31 wherein the posttranslational modification sites are phosphorylation or glycosylation sites.
- 30 33. The method of claim 31 or 32 wherein the method further comprises selecting against at least 2 of the additional characteristics.

34. The method of claim 31 or 32 wherein the method further comprises selecting against the 3 additional characteristics.
35. The method of any one of claims 27-34 wherein the method further comprises performing a BLAST-type or a FAST-type analyses for the candidate polypeptide sequence.
- 5 36. The method of any one of claims 27-34 wherein the method further comprises performing a BLAST analysis for the candidate polypeptide sequence.
37. The method of any one of claims 27-36 wherein the antigenic peptide has a length from 6 amino acids to about 50 amino acids.
38. The method of any one of claims 27-36 wherein the antigenic peptide has a
10 length from 6 amino acids to about 20 amino acids.
39. The method of any one of claims 27-36 wherein the antigenic peptide has a length of about 20 amino acids.
40. The method of any one of claims 27-39 wherein the polypeptide is a protein.
41. The method of any one of claims 27-40 wherein the polypeptide is a human
15 protein.
42. The method of any one of claims 27-41 wherein the polypeptide is a naturally occurring protein.
43. An isolated antigenic peptide that is specific for the candidate polypeptide of any one of claims 27-42 that is produced according to the method of any one of claims 27-42.
- 20 44. An antigenic peptide that is at least about 90% identical to the isolated antigenic peptide of claim 43.
45. An isolated antigenic peptide that is an analog of the isolated antigenic peptide of claim 43.
46. An isolated antigenic peptide comprising a short antigenic amino acid
25 sequence that is identical to at least 5 consecutive amino acids of the isolated antigenic peptide of claim 43.
47. An isolated antigenic peptide comprising a short antigenic amino acid sequence that is identical to or contains no more than one conservative amino acid substitution over at least 7 consecutive amino acids of the isolated antigenic peptide of claim
30 43.
48. A kit for the detection of antibodies against the candidate polypeptide of any one of claims 43-47 in a sample comprising:

a) an isolated antigenic peptide according to any one of claims 43-47 and derived from the candidate polypeptide, and

b) at least one of a reagent or a device for detecting the antibodies.

49. An isolated antibody specific for a candidate polypeptide comprising an amino acid sequence that is identical to the amino acid sequence of the isolated antigenic peptide of claim 43, wherein the antibody was produced using the isolated antigenic peptide of claim 43.

50. An isolated antibody specific for a candidate polypeptide comprising an amino acid sequence that is identical to the amino acid sequence of the isolated antigenic peptide of claim 44, wherein the antibody was produced using the isolated antigenic peptide of claim 44.

51. An isolated antibody specific for a candidate polypeptide comprising an amino acid sequence that is identical to the amino acid sequence of the isolated antigenic peptide of claim 45, wherein the antibody was produced using the isolated antigenic peptide of claim 45.

52. An isolated antibody specific for a candidate polypeptide comprising an amino acid sequence that is identical to the amino acid sequence of the isolated antigenic peptide of claim 46, wherein the antibody was produced using the isolated antigenic peptide of claim 46.

53. An isolated antibody specific for a candidate polypeptide comprising an amino acid sequence that is identical to the amino acid sequence of the isolated antigenic peptide of claim 47, wherein the antibody was produced using the isolated antigenic peptide of claim 47.

54. The isolated antibody of any one of claims 49-53 wherein the antibody has high specificity and high affinity for the candidate polypeptide.

55. A kit for the detection of antibodies against the candidate polypeptide of any one of claims 43-47 comprising:

a) an isolated antibody according to any one of claims 49-53, and

b) at least one of a reagent or a device for detecting the antibody.

56. An assay for the detection of a candidate polypeptide in a sample, comprising:

a) providing an isolated antigenic peptide according to any one of claims 43-47,

b) contacting the isolated antigenic peptide with the sample under conditions suitable and for a time sufficient for the antigenic peptide to bind to one or more antibodies specific for the candidate polypeptide present in the sample, to provide an antibody-bound antigenic peptide, and

c) detecting the antibody-bound antigenic peptide, and therefrom determining whether the sample contains the candidate polypeptide.

57. The assay of claim 56 further comprising the step of binding the isolated antigenic peptide or the antibody to a solid substrate.

58. The assay of claim 56 or 57 wherein the sample is an unpurified sample.

59. The assay of any one of claims 56-58 further comprising, prior to the
5 contacting, obtaining the sample from a human being.

60. The assay of any one of claims 56-59 wherein the assay is selected from the group consisting of a countercurrent immuno-electrophoresis (CIEP) assay, a radioimmunoassay, a radioimmunoprecipitation, an enzyme-linked immuno-sorbent assay (ELISA), a dot blot assay, an inhibition or competition assay, a sandwich assay, an
10 immunostick (dip-stick) assays, a simultaneous assay, an immunochromatographic assay, an immunofiltration assay, a latex bead agglutination assay, an immunofluorescent assay, a biosensor assay, and a low-light detection assay.

61. An isolated nucleic acid molecule encoding an antigenic peptide according to any one of claims 43-47.

15 62. The isolated nucleic acid molecule according to claim 61 wherein the molecule encodes a naturally occurring human antigenic peptide.

63. An isolated nucleic acid molecule encoding an antigenic peptide that is at least about 90% identical to any one of the antigenic peptides set forth in claims 43-47.

64. The isolated nucleic acid molecule according to claim 63 wherein the
20 antigenic peptide is at least about 95% identical to the antigenic peptide.

65. The isolated nucleic acid molecule according to claim 63 or 64 wherein the molecule encodes a naturally occurring human antigenic peptide.

66. A process for producing an isolated polynucleotide comprising hybridizing a nucleotide encoding an antigenic peptide according to any one of claims 43-47 to genomic
25 DNA under highly stringent conditions and isolating the polynucleotide detected with the nucleotide.

SEQ ID NO:	LSID	Gene	Source ID	Sequence	Code	SpeciesName
526	160397	Latrophilin-2	NP_036434.1	<p>MVSSGCRMRS LWFIIVISFL PNTEGFSRAA LPFGL VRREL SCEGYSIDL RCPGSDVMIE SANYGRITDDK ICDADPFQME NTDCYLPDAF KIMTORCNR TQCIVVTGSD VFPDPCPTY KYLEVQYECV PYFVCPGTL KAIVDSPCTY EAEQKAGAWC KDPLQAADKI YFMPWTPYRT DTLEYASLE DFQNSRQTTT YKLPNRVDGT GFVVDGAVF FNKERTRNIV KFDLRTRIS GEAIINYANY HDTSPYRWGG KTDIDLAVDE NGLWVIYATE QNNGMIVISQ LNPYTLRFEA TWEIVYDKRA ASNAFMICGV LYVVRVYQD NESETGKNSI DYIYNTRLNR GEYVDVFPFN QYQYIAADV NPDNQLYVW NNNFILRYSL EFGPPDPAQV PTTAVTITSS AELFKTIIST TSTTSQKQPM STTVAGSQEG SKGTPKPPAV STTKIPPITN IFPLPERFCE ALDSKGKWP QTRGMMVER PCPKGTRGTA SYLCMISTGT WNPKGPDLSN CTSHWVNQLA QKIRSGENAA SLANELAKHT KGPVFAQDVS SSVRLMEQLV DILDAQLQEL KPSEKDSAGR SYNKAIVDTV DNLLRPEALE SWKHMSSEQ AHTATMLLD LEEGAFVLAD NLEPTRVSM PTENIVLEVA VLSTEGQIQD FKFPLGIKGA GSSIQLSANT VKQNSRNGLA KLVIHYRSL GQFLSTENAT IKLGADFIGR NSTIAVNSHV ISVSINKESS RYVLTDPVLF TLPHIDPDNY FNANCSFWNY SERTMMGYWS TQCKLVDTN KTRTTCACSH LTNFAILMAH REIAYKDGTVH ELLTVITWV GIVISLVCLA ICITFCFR GLQSDRNTIH KNLINLFIA EFIFLIGDK TKYAIACPIF AGLLHFFLA AFAWMCLEGV QLYMLVEVF ESEYSRKYY YVAGYLPAT VVGVSAAIDY KSYGTEKACW LHVDNYFIWS FIGPVTIFIL LNIIFLVITL CKMVKHSNTL KPDSSRLNI KSWVLGAFAL LCLLGLTWSF GLLFINEETI VMAYLFTIFN AFQGVFIF HCALQKKVRK EYGKCFRHSY CCGGLPTESP HSSVKASTTR TSARYSSGTQ SRIRRMWNTD VRKQSESSFI SGINSTSTL NOGHSNNAR DTSAMDITPL NGNFNNSYSL HKGDYNDVSQ VVDCGLSLND TAFEKMISE LVHNNLRGSS KTHNLELTL VPQVIGSSS EDDAIVADAS SLMHSDNPL ELHHELEAP LIPQRTSHLL YQPQKKVKSE GTDSYVSQLT AEAEHLQSP NRDSL YTSMP NLRDSPYSPES SPDMEEDLSP SRRSENEIDY YKSMPNLGAG HQLQMCYQIS RGNSDGYIIP INKEGCIPEG DVREGQMQLV TSL ccgcggtctgg gagacagcga gccagatct ggggtttgt gcgagagcca cggcgggggc lggggcgagt gggcggaatg gctgaaggct gcgctctgca acctgaaga gccgctgcat lgaagagcca gagacagcga gaccgggagc atggcagagc ggggccccc ccgctgctgc gggcgggccc ggcctggcctg agccgcgcga gagagcgggc tgcctctgcg cgtccatgga gacgagagaa gggcgaaact ccggagcgcc gcgtccctgc gccgctgccc cggactgctg aagggcgcca gcccgccgg accgcgaggg aagagagacccc cgtccagcc cgcagggccc cggcgggccc agcaatgccc gggcgccctag ggcctgctctg cttccgccc gagcagcgcc gcgggagaggg ccggcgccggg agggcgccgc gccctctg cggcgccccc tgcagctgcg acggcgaccg ctggggctgc tggctcggc cggggccgac ggccgtgccc gaggggctca gcgcctcac ccaagcgctg gatatacga tgggtggac tgcctcggga aggggctgac ggccgtgccc gaggggctca gcgcctcac ccaagcgctg gatatacga tgaacaacat taccagtg ccagagatg caltaaga cttctctt ctagaagagc tacaatggc gggcaacgac cttcttita tccaccacaa ggcctgctt ggggtgaag aactcaagt tcaacgctc cagaataac agtgaaac agtaccagc gaagccattc gggggctgag tctttgcat tctttgcat tagatgcaa ccatlacc tccgtccccc aggacagttt lgaaggact</p>	P	Homo sapiens
527	160411	G Protein-Coupled Receptor GPR48	NM_018490	<p>ccgcggtctgg gagacagcga gccagatct ggggtttgt gcgagagcca cggcgggggc lggggcgagt gggcggaatg gctgaaggct gcgctctgca acctgaaga gccgctgcat lgaagagcca gagacagcga gaccgggagc atggcagagc ggggccccc ccgctgctgc gggcgggccc ggcctggcctg agccgcgcga gagagcgggc tgcctctgcg cgtccatgga gacgagagaa gggcgaaact ccggagcgcc gcgtccctgc gccgctgccc cggactgctg aagggcgcca gcccgccgg accgcgaggg aagagagacccc cgtccagcc cgcagggccc cggcgggccc agcaatgccc gggcgccctag ggcctgctctg cttccgccc gagcagcgcc gcgggagaggg ccggcgccggg agggcgccgc gccctctg cggcgccccc tgcagctgcg acggcgaccg ctggggctgc tggctcggc cggggccgac ggccgtgccc gaggggctca gcgcctcac ccaagcgctg gatatacga tgggtggac tgcctcggga aggggctgac ggccgtgccc gaggggctca gcgcctcac ccaagcgctg gatatacga tgaacaacat taccagtg ccagagatg caltaaga cttctctt ctagaagagc tacaatggc gggcaacgac cttcttita tccaccacaa ggcctgctt ggggtgaag aactcaagt tcaacgctc cagaataac agtgaaac agtaccagc gaagccattc gggggctgag tctttgcat tctttgcat tagatgcaa ccatlacc tccgtccccc aggacagttt lgaaggact</p>	A	Homo sapiens

528 160411 G Protein-
Coupled Receptor
GPR48 NP_060960.1 P Homo
sapiens

atgttatia taaaaataga agaagaaaga alaaagctia gtctgtgtc ttataaatt aaaaatttta cttgattooc atlatgggc
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caaaattcag gtattgaaa atttttatt ttattcatt aaaaactiaa ataacagata taaaagtg ttaactttg tgcataatgg
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LSGLKELKVL TLQNNQLKTV PSEAIRGLSA LQSLRLDANH ITSVPEDSFE
GLVQLRHLWL DDNSLTVVPV HPLSNLPTLQ ALTLALNKIS SIPDFAFTNL
SSLVVLHLHN NKIRGLSQHC FDGLDNLETL DLSYNNLGEF PQAIAKARPSL
KELGFHSNSI SVTPDGAFDG NPLLRTHLY DNPLSFVGN SASHNLSDLHS
LVIRGASMVQ QFPNLTGT VH LESLTLTGK ISSIPNNLCQ EQKMLRTLDL
SYNNIRDLPS FNGCHALEEI SLQRNQYQI KEGTFQGLIS LRILDLSRNL IHEIHSRAFA
TLGPITNLDV SFNELTSFT EGPNGLNQLK LVGNFKLKEA LAAKDFVNL
SLSPYAYQC CAFWGCDSYA NLNTEDNSLQ DHSVAQEKGT ADAANVTSTL
ENEEHSQIII HCTPSTGAFK PCEYLLGSWM IRLTVWFEL VALFFNLLVI LTTFASCTSL
PSSKLFGLI SVSNLFMGIY TGILTFDVA SWGRFAEFGI WWETGSGCKV
AGFLAVFSSE SAIFLLMLAT VERSLSAKDI MKNGKSNHLK QFRVAALSFA
LGATVAGCFP LFHRGEYSAS PLCLPPTGE TPSLGTFTVL VLLNSLAFLL
MAVYTKLYC NLEKEDLSEN SQSSMIKHVA WLFTNCFIP CPVAFFSFAP LITAISPE
IMKSVTLIFF PLPACLNPLV YVFFNPKFKE DWKLLKRRVT KKS GSVSVSI
SSQGGCLEQD FYDTCGMYSH LQGNLTVCDC CESFLLTKPV SKHLKSHS
CPALAVASQ RPEGYWSDCG TQSAHSDYAD EEDSFVSDSS DQVQACGRAC
FYQSRGFPLV RYAYNLPRVK D

529 160435 LS160435
Receptor AX147830 A Homo
sapiens

aactggaaag gcagcgtct gcgcccacg aacacttct caagcactt ggtgtgaccac ggtgtgcaag ctgtgtgctg
gcccccgag tccgggctc tgaagcaagg ccgtcgactt aagcgttga tctgttacc tggagacct ctgagctc
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accatctca tctgtgtgtt cctcatccc ttgtgtatca ccgtgtgtgt ttacacggcc accatctca agcgtgtgog
cacggagggag gcgcacggcc gggagcagcg gggcgcgcg gggcgctgg cgcgtgtgtgt ctgtgtggcc ttgtacct

530	160435	LS160435 Receptor	LR80	<p>gcttggccc caacaattc gtgtctctgg cgcacatcgt gaggccggcctg ttctacggca agagctacta ccaagtgtac aagctacagc tgtgtctcag ctgcccaac aactgtctgg accgttgtt ttactattt ggtgtccggg aattccagct ggccttgcgg gaaatttgg gcttgcggccg ggtgtccaga gacacctgg acacggcccg cgaagcttc ttctccgcca ggaaccagtc ctgtgcttc gaggccgggtg cgcacctga agggatggag gggaccacca ggcgggctt ccaaggagcag gagggtgtgt tctgattccc gggggccagc ctgtgagagc cggggcgcca gcttggagga tccagggggc catggagagg ccaagggtgc agaggticag ggaagaacag tgcgttctc caggccacgt cagagggccg ggggggaagg gtcocaggc ttattccic ccaggccactg cagaggcacc ggtgaggaag ggttccagg cttactcag ggtagagaaa caagcaagg ccaaggcagc acagggtgtc tgttalcgt cagaggggtgc ctgtcctt ctgtgtcagg ggaacgttgc tgtaccagc cccggctaat ttgttatt tttttag agcttgggtg tcccccca gctctttag cacctcac accgttccat acccgaggat ggtattcaa ccagccccc cgcctaccg actcgttct tggataltct ctgtggcgga actggagcc ccattccag ctcttccc tgtgacalc gtcctiagc acactgtcc ataccggag ggtatttc aaccagccc accgttacc cgtctcgtt tctggatalt ctctgtgggc gaaactggag cccattccc agctctct cctgtcagca tctgtccctta gttgtgttc tggccttcc calctcttc cagggtgtct ggtctcgtg gccgggtga cgcggaaatt tctgttatt tcaatcagg gcactgtgt tgcgtgtgtt ggaattctc ttcaaggga ggcgttgggg cctctgcaag tcaagtact tccgtgcca ctccccca cacacaccc ccccgtgc cgaattc</p> <p>MOVPNSTGPD NATLQMLRNP AIAVALPVVY SLVAA VSIPG NLFSLWVLCR P RMGPRSPSVI FMINLSVTDL MLASVLPFQI YYHCNRHHWV FGVLLCNVVT VAFYANMYSS ILTMTCSIVE RFLGVLPLS SKRWRRRRYA VAACAGTWLL LLTALSPLAR TDLTYPVHAL GIITCFDVLK WTMPLSVAMW AVFLFTFIL LFLPFVITV ACYTATILKL LRTEEAHGRE QRRRAVGLAA VLLAFVTCF APNNFVLLAH IVSRLFYGKS YYHVYKLJLC LSLNCLDP FVYFASREF QLRLEYLGC RRVPRDLTDI RRESLFSART TSVRSEAGAH PEGMEGATRP GLQRQESVF A gaaatggccc aaaggagct atgtctct gaagactgc agcaaggctt gctgaggctc acagaagata gccccagctt tttggaggtg tttaaatgt galtctgaga tcaactgac tgaactggaa tcttgggttt atacttacc agctacaaa ccttggagtc ttagaaatt ttcttca ataaagcag atccttact tccctcaga tgaacacag tctgtcttc tgcacagtt ataaagatc ggagccalc acgtatttt ttattagt ttctgtt ggaattatg gaaattgtt tgaacactgg gctttatc agaagaatc gaacacagg tgtgtgaga tctactaat taattgtt acagccgatt tctgtctac tctggcata ccaagtgaata ttgttga cttgggtgtg gcaccttga agctgaagat atccacgc caagtacag cctgctcat ctatataat atgtattat caatactt cttagcatt gtcagcatg accgtgtct tcaactgaga cacagctgca agatctacc aatacaagaa cccggattg ccaaatgat atcaaccgtt ggtgtgctaa tggctcttct taaatggg ccaatatga tgaatccat caaagacalc aaggaaaagt caaatgtgg ttgagggg tttaaaagg aatttggag aaattggcat ttgtcgaata attcatagt ttagcaata tttaaat tctagccat catttaata tccaatgct ttgtaattg acagctctac agaacaagaa ataatgaaaa ttacccaaat gtgaaaaagg ctctcatca calacttta gtgaccagc gctacatcat atgttgtt ccttaccaga gaggctacac tgcctctggc tgtgtgaac ctgtgtcttg cagaagatc aactgtatg tcaacaggga ttactctt caaaggccaaa gaggctacac tgcctctggc tgcctctggc tgcctcttg atctatctt gctactac ctctcaaaag ccttcgctc aaaggctc gaggctcctt cctacctaa agagaccaag gctcagaag aaaaattag atgtgaaat aatgcataaa agacaggat ttgtgcta ccaattctgg ccttactgga ccataaagt aattatgtc tgaagata aaaaaaaa aaagcggcc gc MTNSFFCPV YKDLFPFTYF FYLVFLVGII GSCFATWAFI QKNTNHRCSV P IYLINLTAD FLLJLALPVK IVVDLGVAPW KLKIFHCQVT ACLIYNMYL SIIFLAFVSI DRCLQLTHSC KIYRIQEPGF AKMISTVVWL MVLLIMVPNM MPIKDIKEK</p>	Homo sapiens
531	160889	Platelet Activating Receptor Homolog (H963)	NM_013308	<p>gcttggccc caacaattc gtgtctctgg cgcacatcgt gaggccggcctg ttctacggca agagctacta ccaagtgtac aagctacagc tgtgtctcag ctgcccaac aactgtctgg accgttgtt ttactattt ggtgtccggg aattccagct ggccttgcgg gaaatttgg gcttgcggccg ggtgtccaga gacacctgg acacggcccg cgaagcttc ttctccgcca ggaaccagtc ctgtgcttc gaggccgggtg cgcacctga agggatggag gggaccacca ggcgggctt ccaaggagcag gagggtgtgt tctgattccc gggggccagc ctgtgagagc cggggcgcca gcttggagga tccagggggc catggagagg ccaagggtgc agaggticag ggaagaacag tgcgttctc caggccacgt cagagggccg ggggggaagg gtcocaggc ttattccic ccaggccactg cagaggcacc ggtgaggaag ggttccagg cttactcag ggtagagaaa caagcaagg ccaaggcagc acagggtgtc tgttalcgt cagaggggtgc ctgtcctt ctgtgtcagg ggaacgttgc tgtaccagc cccggctaat ttgttatt tttttag agcttgggtg tcccccca gctctttag cacctcac accgttccat acccgaggat ggtattcaa ccagccccc cgcctaccg actcgttct tggataltct ctgtggcgga actggagcc ccattccag ctcttccc tgtgacalc gtcctiagc acactgtcc ataccggag ggtatttc aaccagccc accgttacc cgtctcgtt tctggatalt ctctgtgggc gaaactggag cccattccc agctctct cctgtcagca tctgtccctta gttgtgttc tggccttcc calctcttc cagggtgtct ggtctcgtg gccgggtga cgcggaaatt tctgttatt tcaatcagg gcactgtgt tgcgtgtgtt ggaattctc ttcaaggga ggcgttgggg cctctgcaag tcaagtact tccgtgcca ctccccca cacacaccc ccccgtgc cgaattc</p> <p>MOVPNSTGPD NATLQMLRNP AIAVALPVVY SLVAA VSIPG NLFSLWVLCR P RMGPRSPSVI FMINLSVTDL MLASVLPFQI YYHCNRHHWV FGVLLCNVVT VAFYANMYSS ILTMTCSIVE RFLGVLPLS SKRWRRRRYA VAACAGTWLL LLTALSPLAR TDLTYPVHAL GIITCFDVLK WTMPLSVAMW AVFLFTFIL LFLPFVITV ACYTATILKL LRTEEAHGRE QRRRAVGLAA VLLAFVTCF APNNFVLLAH IVSRLFYGKS YYHVYKLJLC LSLNCLDP FVYFASREF QLRLEYLGC RRVPRDLTDI RRESLFSART TSVRSEAGAH PEGMEGATRP GLQRQESVF A gaaatggccc aaaggagct atgtctct gaagactgc agcaaggctt gctgaggctc acagaagata gccccagctt tttggaggtg tttaaatgt galtctgaga tcaactgac tgaactggaa tcttgggttt atacttacc agctacaaa ccttggagtc ttagaaatt ttcttca ataaagcag atccttact tccctcaga tgaacacag tctgtcttc tgcacagtt ataaagatc ggagccalc acgtatttt ttattagt ttctgtt ggaattatg gaaattgtt tgaacactgg gctttatc agaagaatc gaacacagg tgtgtgaga tctactaat taattgtt acagccgatt tctgtctac tctggcata ccaagtgaata ttgttga cttgggtgtg gcaccttga agctgaagat atccacgc caagtacag cctgctcat ctatataat atgtattat caatactt cttagcatt gtcagcatg accgtgtct tcaactgaga cacagctgca agatctacc aatacaagaa cccggattg ccaaatgat atcaaccgtt ggtgtgctaa tggctcttct taaatggg ccaatatga tgaatccat caaagacalc aaggaaaagt caaatgtgg ttgagggg tttaaaagg aatttggag aaattggcat ttgtcgaata attcatagt ttagcaata tttaaat tctagccat catttaata tccaatgct ttgtaattg acagctctac agaacaagaa ataatgaaaa ttacccaaat gtgaaaaagg ctctcatca calacttta gtgaccagc gctacatcat atgttgtt ccttaccaga gaggctacac tgcctctggc tgtgtgaac ctgtgtcttg cagaagatc aactgtatg tcaacaggga ttactctt caaaggccaaa gaggctacac tgcctctggc tgcctctggc tgcctcttg atctatctt gctactac ctctcaaaag ccttcgctc aaaggctc gaggctcctt cctacctaa agagaccaag gctcagaag aaaaattag atgtgaaat aatgcataaa agacaggat ttgtgcta ccaattctgg ccttactgga ccataaagt aattatgtc tgaagata aaaaaaaa aaagcggcc gc MTNSFFCPV YKDLFPFTYF FYLVFLVGII GSCFATWAFI QKNTNHRCSV P IYLINLTAD FLLJLALPVK IVVDLGVAPW KLKIFHCQVT ACLIYNMYL SIIFLAFVSI DRCLQLTHSC KIYRIQEPGF AKMISTVVWL MVLLIMVPNM MPIKDIKEK</p>	Homo sapiens
532	160889	Platelet Activating Receptor	NP_037440.1	<p>gcttggccc caacaattc gtgtctctgg cgcacatcgt gaggccggcctg ttctacggca agagctacta ccaagtgtac aagctacagc tgtgtctcag ctgcccaac aactgtctgg accgttgtt ttactattt ggtgtccggg aattccagct ggccttgcgg gaaatttgg gcttgcggccg ggtgtccaga gacacctgg acacggcccg cgaagcttc ttctccgcca ggaaccagtc ctgtgcttc gaggccgggtg cgcacctga agggatggag gggaccacca ggcgggctt ccaaggagcag gagggtgtgt tctgattccc gggggccagc ctgtgagagc cggggcgcca gcttggagga tccagggggc catggagagg ccaagggtgc agaggticag ggaagaacag tgcgttctc caggccacgt cagagggccg ggggggaagg gtcocaggc ttattccic ccaggccactg cagaggcacc ggtgaggaag ggttccagg cttactcag ggtagagaaa caagcaagg ccaaggcagc acagggtgtc tgttalcgt cagaggggtgc ctgtcctt ctgtgtcagg ggaacgttgc tgtaccagc cccggctaat ttgttatt tttttag agcttgggtg tcccccca gctctttag cacctcac accgttccat acccgaggat ggtattcaa ccagccccc cgcctaccg actcgttct tggataltct ctgtggcgga actggagcc ccattccag ctcttccc tgtgacalc gtcctiagc acactgtcc ataccggag ggtatttc aaccagccc accgttacc cgtctcgtt tctggatalt ctctgtgggc gaaactggag cccattccc agctctct cctgtcagca tctgtccctta gttgtgttc tggccttcc calctcttc cagggtgtct ggtctcgtg gccgggtga cgcggaaatt tctgttatt tcaatcagg gcactgtgt tgcgtgtgtt ggaattctc ttcaaggga ggcgttgggg cctctgcaag tcaagtact tccgtgcca ctccccca cacacaccc ccccgtgc cgaattc</p> <p>MOVPNSTGPD NATLQMLRNP AIAVALPVVY SLVAA VSIPG NLFSLWVLCR P RMGPRSPSVI FMINLSVTDL MLASVLPFQI YYHCNRHHWV FGVLLCNVVT VAFYANMYSS ILTMTCSIVE RFLGVLPLS SKRWRRRRYA VAACAGTWLL LLTALSPLAR TDLTYPVHAL GIITCFDVLK WTMPLSVAMW AVFLFTFIL LFLPFVITV ACYTATILKL LRTEEAHGRE QRRRAVGLAA VLLAFVTCF APNNFVLLAH IVSRLFYGKS YYHVYKLJLC LSLNCLDP FVYFASREF QLRLEYLGC RRVPRDLTDI RRESLFSART TSVRSEAGAH PEGMEGATRP GLQRQESVF A gaaatggccc aaaggagct atgtctct gaagactgc agcaaggctt gctgaggctc acagaagata gccccagctt tttggaggtg tttaaatgt galtctgaga tcaactgac tgaactggaa tcttgggttt atacttacc agctacaaa ccttggagtc ttagaaatt ttcttca ataaagcag atccttact tccctcaga tgaacacag tctgtcttc tgcacagtt ataaagatc ggagccalc acgtatttt ttattagt ttctgtt ggaattatg gaaattgtt tgaacactgg gctttatc agaagaatc gaacacagg tgtgtgaga tctactaat taattgtt acagccgatt tctgtctac tctggcata ccaagtgaata ttgttga cttgggtgtg gcaccttga agctgaagat atccacgc caagtacag cctgctcat ctatataat atgtattat caatactt cttagcatt gtcagcatg accgtgtct tcaactgaga cacagctgca agatctacc aatacaagaa cccggattg ccaaatgat atcaaccgtt ggtgtgctaa tggctcttct taaatggg ccaatatga tgaatccat caaagacalc aaggaaaagt caaatgtgg ttgagggg tttaaaagg aatttggag aaattggcat ttgtcgaata attcatagt ttagcaata tttaaat tctagccat catttaata tccaatgct ttgtaattg acagctctac agaacaagaa ataatgaaaa ttacccaaat gtgaaaaagg ctctcatca calacttta gtgaccagc gctacatcat atgttgtt ccttaccaga gaggctacac tgcctctggc tgtgtgaac ctgtgtcttg cagaagatc aactgtatg tcaacaggga ttactctt caaaggccaaa gaggctacac tgcctctggc tgcctctggc tgcctcttg atctatctt gctactac ctctcaaaag ccttcgctc aaaggctc gaggctcctt cctacctaa agagaccaag gctcagaag aaaaattag atgtgaaat aatgcataaa agacaggat ttgtgcta ccaattctgg ccttactgga ccataaagt aattatgtc tgaagata aaaaaaaa aaagcggcc gc MTNSFFCPV YKDLFPFTYF FYLVFLVGII GSCFATWAFI QKNTNHRCSV P IYLINLTAD FLLJLALPVK IVVDLGVAPW KLKIFHCQVT ACLIYNMYL SIIFLAFVSI DRCLQLTHSC KIYRIQEPGF AKMISTVVWL MVLLIMVPNM MPIKDIKEK</p>	Homo sapiens

535	161214	Galanin Receptor GalR3	NM_003614	<p>GKRRSSLDGS ESAKTSLQVT NLVSAIVELY DSLTGVPIV VSFSLKSDS APPWMVLAVL WCSMAQITLL PSFIWSCERY RADVRTVWEQ CVAIMSEEDG DDGGGDDYA EGRVCKVRF ANGATGSGR DPAQVKLLPG RHMLFPPLER VHYLQVPLSR RLSHDETNI STPREPGSFL HKWSSDDIR VLPQSRALG GPPEYLGQRH RLEDEEDEEE AEGGGLASLR QFLESGLVS GGPPRGPFG FREEITFID ETPLSPAS PGHSRRPRP LGLSPRRLSL GSPESRAVGL PLGLSAGRRC SLTGEESAR AWGSGWPGN PIFQLTL</p> <p>tccaggtgc ccgtctgatg gggagatggc tgalgcccag aacatttacc tggacagccc agggagtggtg gggggcgtgg cagtgcctgt ggttttgc ctatcttc tgcgtggcac agtgggcaat gggctgggtc tggcagtgct ccggcagctt ggcccgagtg cctggcagga gctggcagc acccaggacc tgitatctt caacctggcg gttgctgacc tctgttcat cctgtgtgc gtgccttc agggccacct ctacagctg galgctggc tcttggggc cctgtgtgc aagggcgtgc acctgtcat ctacctacc atgtacgcca gcagctttac gctggctgt gttccgtggc acaggtaact gggcgtggcg caaccgtgc gctcgcgcg cctggcgacg ccgctgaacg ccggcgccg agtggggctg gttggctgc tggcgggct cttctggcg cctacctca gctactacgg caccgtgcg taccggcgcc ctactgtcg cctgtggctg tggtagagct gggcggcg cgcccgccg cgccctggac gttggccacct tggctggcg ctactgtcg cctgtggctg tggtagagct gggcggcg cgacgctgc gcttctgt gggcgccgtg gttcccgcg gggcgggcg gggcgggcg gggcgggcg gggcgggcg cgggggcg gctatgtcg cgggtggcg gcttactgc ctctggcg gttccgacga cggcgtatc ctgtgtctt ggtacggcg ctgccttc agccggcca ctactgtcg ccggctggcg tcaactgtc tggctacgc caactctgc ctcaaccg tggctacg gttggctcg cggcacttc gggcggtt ccggcgctg tggcggtgc gggcgggcg ccggcaccgt gggcgcgcg cctgtgtcg gttccggcg ggttctgg gggcgggcg gggcgggcg gggcgggcg ctaggggg ggtgtgggt ggtggcgcg gttccggcg ggttctgg gggcgggcg gggcgggcg gggcgggcg ggacgggat aaactgc gctggac gctgt</p> <p>MADAQNISLD SPGSGAVAV PVFALIFLL GTVGNGLVLA VLLQGPSAW QEPGSTIDLF ILNLAVADLC FILCCVPFQA TTYTLDWLF GALVCKAVHL LIYLTMYASS FTLAASVDR YLAVRHPLRS RALRTPNAR AAVGLVWLLA ALFSAPYLS YGTVRYGALE LCVPAWEDAR RRALDVATFA AGYLLPVAVV SLAYGRTLRF LWAAVGPAGA AAAEARRRAT GRAGRAMLAV AALYALCWGP HHALILCFWY GREAFSPATY ACRLASHCLA YANSCLNPLV YALASRHFRA RFRRLWPCGR RRRHRARRAL RVRPSSGP PCPGDARPS GRLLAGGGQG PEPREGPVHG GEAAARGPE</p> <p>atggcgctga ccccgagtc ccgagcagc ttccctggcg tggcgggcg cggcagctct gttccggcg cggcgtggcg cccaacgca accttcaaa gttcttggcg cagcccgacc gaggccagct ccttgggagga cttgggtggc acgggacaca ttgggactt gtttggcg atggcggtg tggcggtg gggcgacgc taccagctg tggtagctg cgtctcctg cgtggcg cctcagta cgtactg gtaacctg ggttggcg cgttggcg cgttggcg cgttggcg tcccttcat cgtggcgacc taccagca agggagtgga cttggggcg gttggcg gttggcg gttggcg gttggcg gttggcg tgcagccag cacttcaag ctagcgta ttagcagga gtcagctg gttggcg gttggcg gttggcg gttggcg cgcccaagg gttacggca gtttggcg cttggcg gttggcg gttggcg gttggcg gttggcg gttggcg cgtggcg gttggcg gttggcg gttggcg gttggcg gttggcg gttggcg gttggcg gttggcg tggcttgc caccagc gttggcg gttggcg gttggcg gttggcg gttggcg gttggcg gttggcg gttggcg tgcagcg cctcttcaa gggggcg gttggcg gttggcg gttggcg gttggcg gttggcg gttggcg gttggcg</p>	A	Homo sapiens
536	161214	Galanin Receptor GalR3	NP_003605.1	<p>QEPGSTIDLF ILNLAVADLC FILCCVPFQA TTYTLDWLF GALVCKAVHL LIYLTMYASS FTLAASVDR YLAVRHPLRS RALRTPNAR AAVGLVWLLA ALFSAPYLS YGTVRYGALE LCVPAWEDAR RRALDVATFA AGYLLPVAVV SLAYGRTLRF LWAAVGPAGA AAAEARRRAT GRAGRAMLAV AALYALCWGP HHALILCFWY GREAFSPATY ACRLASHCLA YANSCLNPLV YALASRHFRA RFRRLWPCGR RRRHRARRAL RVRPSSGP PCPGDARPS GRLLAGGGQG PEPREGPVHG GEAAARGPE</p> <p>atggcgctga ccccgagtc ccgagcagc ttccctggcg tggcgggcg cggcagctct gttccggcg cggcgtggcg cccaacgca accttcaaa gttcttggcg cagcccgacc gaggccagct ccttgggagga cttgggtggc acgggacaca ttgggactt gtttggcg atggcggtg tggcggtg gggcgacgc taccagctg tggtagctg cgtctcctg cgtggcg cctcagta cgtactg gtaacctg ggttggcg cgttggcg cgttggcg cgttggcg tcccttcat cgtggcgacc taccagca agggagtgga cttggggcg gttggcg gttggcg gttggcg gttggcg gttggcg tgcagccag cacttcaag ctagcgta ttagcagga gtcagctg gttggcg gttggcg gttggcg gttggcg cgcccaagg gttacggca gtttggcg cttggcg gttggcg gttggcg gttggcg gttggcg gttggcg cgtggcg gttggcg gttggcg gttggcg gttggcg gttggcg gttggcg gttggcg gttggcg tggcttgc caccagc gttggcg gttggcg gttggcg gttggcg gttggcg gttggcg gttggcg gttggcg tgcagcg cctcttcaa gggggcg gttggcg gttggcg gttggcg gttggcg gttggcg gttggcg gttggcg</p>	P	Homo sapiens
537	161221	Urotensin-II Receptor (GPR14)	NM_018949	<p>atggcgctga ccccgagtc ccgagcagc ttccctggcg tggcgggcg cggcagctct gttccggcg cggcgtggcg cccaacgca accttcaaa gttcttggcg cagcccgacc gaggccagct ccttgggagga cttgggtggc acgggacaca ttgggactt gtttggcg atggcggtg tggcggtg gggcgacgc taccagctg tggtagctg cgtctcctg cgtggcg cctcagta cgtactg gtaacctg ggttggcg cgttggcg cgttggcg cgttggcg tcccttcat cgtggcgacc taccagca agggagtgga cttggggcg gttggcg gttggcg gttggcg gttggcg gttggcg tgcagccag cacttcaag ctagcgta ttagcagga gtcagctg gttggcg gttggcg gttggcg gttggcg cgcccaagg gttacggca gtttggcg cttggcg gttggcg gttggcg gttggcg gttggcg gttggcg cgtggcg gttggcg gttggcg gttggcg gttggcg gttggcg gttggcg gttggcg gttggcg tggcttgc caccagc gttggcg gttggcg gttggcg gttggcg gttggcg gttggcg gttggcg gttggcg tgcagcg cctcttcaa gggggcg gttggcg gttggcg gttggcg gttggcg gttggcg gttggcg gttggcg</p>	A	Homo sapiens

538	161221	Urotensin-II Receptor (GPR14)	NP_061822.1	<p>ctgggctgc ttctggcct tctggctgtg gcagctgtct gccagctacc accaggcccc gctggcgccg cggagcgccg gcatgctaa ctactgacc actgctca cctacggcaa cagctggccg aacctctcc tctacagct gctaccagg aactacggc accactggc cggcgccgtg cggggccgg gcagcggggg aggcgggggg cccgttccct cctgcagcc ccggccgc ttacagct gtcggccg cctcctgt tctgcagc cacagccac tgacgctc gtgctggccc cagggcccc ggccgact gcggcgagg gtccaggcg cccgggtga MALTPESPSS FPGLAATGSS VPEPPGGPNA TLNSSWASPT EPSSLEDLVA TGITGTLISA MGVVGVVGN YTLVVTCSR LRAVAMYVYV VNLALADLLY LLSIPFIVAT YVTKWHFGD VGRVLFGLD FLTMHASIFT LTMSSERYA AVLRPLDTVQ RPKGYRKL LA LGTWLLALL TLPVLMAMRL VRRGPKSLCL PAWGPRAHRA YLTLLFATSI AGPGLLIGLL YARLARAYRR SQRASFRRAR RPGARALRLV LGIVLLFWAC FLPFWLWQLL AQYHQAPLAP RTARIVNYLT TCLTYGNSCA NPFLYTLTR NYRDHLRGRV RGPGGGGRG PVPSLQPRAR FQRCGRSL SCSQPOTDSL VLAPAAPAR APEGPRAPA atggctgca atggcagtc ggccagggg cacttgacc ctgaggact gaactgact gacgaggcac tgagactcaa gtacctggg cccagcaga cagagctgt catgccalc tggccacat acttgctgat ctctgtgtg ggogctgtg gcaatgggt gacctgtg gcatctgc gccacaagg catggcacg ctaccaact actacctt cagctggcc gtgctggacc tctgtgtgt gctgtgggg cgtccctgg agctatga gatgggac aactacctt tctgtggg cgtgtgtg tctatttc gcagctact gttgagatg tctgtctgg cctcagct caacgtact gccctgagcg tggagagcta tggggcggt ggacccac tccagccag gtccatgtg acggggcc atgtggccg agtctggg ggcgtggg gctgtccat gctgtctc ctgccaca ccagctgca cggcatcgg cagctgcaeg tggctggc ggggccag cagactcag ctgttgcat gctgttcgc ccagggccc tctacaact tgaatgtag accaccggc tctctctt ctgctggcc atggccatca tgaagctgt ctactgtc atggcgctg gactggcg gtagagagctg ctgctatgc agggagccaa ggccagggg tctgcagcag ccaggtccag atacactgc aggtccagc agcagatcg ggggggaga caagtacca agatctgt tctgtgtg tgggtgtg gcatctgt ggcccgct cagcgacc gcgtatgt gagctgtg tccagtgga cagatggct gcacctggc ttccagcac tgcagctat ctccggcatc ttcttacc tggctggc ggccacccc gtgtctata gctctatg cagccgttc cagagacct tccaggtggc cctgtggct gggtgctgt gccatgct cagacccc cagagctcc acagctcag caggtgacc acaggcagca ccctgtga tggggctcc ctggcagct gggtccacc cctggctgg aacgatggc cagaggcgca gcaagagacc gacatctt ga MACNGSAARG HFDPEDLNL DEALRLKYL G PQQTELFMPI CATYLLIFV GAVGNGLTCL VILRHKAMRT PTNYLFLSLA VSDLLVLLVG LPLELYEMWH NYPFLGVGG CYFRILLFEM VCLASVLNVT ALSVERYAV VHPLQARSMV TRAHVRRVLG AVWGLAMLC LPTSLHGR QLVPCRPV PDSA VCMVLR PRALYNMVVQ TTALLFFCLP MAMSVLYLL IGLRLRRERL LLMQEA KGRG SAAARSRYTC RLQHQHRRR QVTKMLFVL VVFGICWAPF HADRVMSV SQWTDGLHLA FQHVHVISI FFYLGSAANP VLYSLMSSRF RETFQEA LCL GACCHRLRPR HSSHLSRMT TGSTLCDVGS LGSWVHPLAG NDGPEAQQT DPS atggtaacc tgcacaaata cactgaaca ttaagatgg gtagcaacag taccagact gctgagatt actgaatg cactaatg aaatttcaat actctctta tgaacacc tatactca taticctta tggctctg gctaacag cagcctgtg ggttctgt cgttcatca gcaagaaaaa taagccalc atttcatga tcaactctc tgggtgtg cttgtcatg tattatctt</p>	P	Homo sapiens
539	161249	G Protein- Coupled Receptor GPR66	NM_006056	<p>atggctgca atggcagtc ggccagggg cacttgacc ctgaggact gaactgact gacgaggcac tgagactcaa gtacctggg cccagcaga cagagctgt catgccalc tggccacat acttgctgat ctctgtgtg ggogctgtg gcaatgggt gacctgtg gcatctgc gccacaagg catggcacg ctaccaact actacctt cagctggcc gtgctggacc tctgtgtgt gctgtgggg cgtccctgg agctatga gatgggac aactacctt tctgtggg cgtgtgtg tctatttc gcagctact gttgagatg tctgtctgg cctcagct caacgtact gccctgagcg tggagagcta tggggcggt ggacccac tccagccag gtccatgtg acggggcc atgtggccg agtctggg ggcgtggg gctgtccat gctgtctc ctgccaca ccagctgca cggcatcgg cagctgcaeg tggctggc ggggccag cagactcag ctgttgcat gctgttcgc ccagggccc tctacaact tgaatgtag accaccggc tctctctt ctgctggcc atggccatca tgaagctgt ctactgtc atggcgctg gactggcg gtagagagctg ctgctatgc agggagccaa ggccagggg tctgcagcag ccaggtccag atacactgc aggtccagc agcagatcg ggggggaga caagtacca agatctgt tctgtgtg tgggtgtg gcatctgt ggcccgct cagcgacc gcgtatgt gagctgtg tccagtgga cagatggct gcacctggc ttccagcac tgcagctat ctccggcatc ttcttacc tggctggc ggccacccc gtgtctata gctctatg cagccgttc cagagacct tccaggtggc cctgtggct gggtgctgt gccatgct cagacccc cagagctcc acagctcag caggtgacc acaggcagca ccctgtga tggggctcc ctggcagct gggtccacc cctggctgg aacgatggc cagaggcgca gcaagagacc gacatctt ga MACNGSAARG HFDPEDLNL DEALRLKYL G PQQTELFMPI CATYLLIFV GAVGNGLTCL VILRHKAMRT PTNYLFLSLA VSDLLVLLVG LPLELYEMWH NYPFLGVGG CYFRILLFEM VCLASVLNVT ALSVERYAV VHPLQARSMV TRAHVRRVLG AVWGLAMLC LPTSLHGR QLVPCRPV PDSA VCMVLR PRALYNMVVQ TTALLFFCLP MAMSVLYLL IGLRLRRERL LLMQEA KGRG SAAARSRYTC RLQHQHRRR QVTKMLFVL VVFGICWAPF HADRVMSV SQWTDGLHLA FQHVHVISI FFYLGSAANP VLYSLMSSRF RETFQEA LCL GACCHRLRPR HSSHLSRMT TGSTLCDVGS LGSWVHPLAG NDGPEAQQT DPS atggtaacc tgcacaaata cactgaaca ttaagatgg gtagcaacag taccagact gctgagatt actgaatg cactaatg aaatttcaat actctctta tgaacacc tatactca taticctta tggctctg gctaacag cagcctgtg ggttctgt cgttcatca gcaagaaaaa taagccalc atttcatga tcaactctc tgggtgtg cttgtcatg tattatctt</p>	A	Homo sapiens
540	161249	G Protein- Coupled Receptor GPR66	NP_006047.1	<p>atggctgca atggcagtc ggccagggg cacttgacc ctgaggact gaactgact gacgaggcac tgagactcaa gtacctggg cccagcaga cagagctgt catgccalc tggccacat acttgctgat ctctgtgtg ggogctgtg gcaatgggt gacctgtg gcatctgc gccacaagg catggcacg ctaccaact actacctt cagctggcc gtgctggacc tctgtgtgt gctgtgggg cgtccctgg agctatga gatgggac aactacctt tctgtggg cgtgtgtg tctatttc gcagctact gttgagatg tctgtctgg cctcagct caacgtact gccctgagcg tggagagcta tggggcggt ggacccac tccagccag gtccatgtg acggggcc atgtggccg agtctggg ggcgtggg gctgtccat gctgtctc ctgccaca ccagctgca cggcatcgg cagctgcaeg tggctggc ggggccag cagactcag ctgttgcat gctgttcgc ccagggccc tctacaact tgaatgtag accaccggc tctctctt ctgctggcc atggccatca tgaagctgt ctactgtc atggcgctg gactggcg gtagagagctg ctgctatgc agggagccaa ggccagggg tctgcagcag ccaggtccag atacactgc aggtccagc agcagatcg ggggggaga caagtacca agatctgt tctgtgtg tgggtgtg gcatctgt ggcccgct cagcgacc gcgtatgt gagctgtg tccagtgga cagatggct gcacctggc ttccagcac tgcagctat ctccggcatc ttcttacc tggctggc ggccacccc gtgtctata gctctatg cagccgttc cagagacct tccaggtggc cctgtggct gggtgctgt gccatgct cagacccc cagagctcc acagctcag caggtgacc acaggcagca ccctgtga tggggctcc ctggcagct gggtccacc cctggctgg aacgatggc cagaggcgca gcaagagacc gacatctt ga MACNGSAARG HFDPEDLNL DEALRLKYL G PQQTELFMPI CATYLLIFV GAVGNGLTCL VILRHKAMRT PTNYLFLSLA VSDLLVLLVG LPLELYEMWH NYPFLGVGG CYFRILLFEM VCLASVLNVT ALSVERYAV VHPLQARSMV TRAHVRRVLG AVWGLAMLC LPTSLHGR QLVPCRPV PDSA VCMVLR PRALYNMVVQ TTALLFFCLP MAMSVLYLL IGLRLRRERL LLMQEA KGRG SAAARSRYTC RLQHQHRRR QVTKMLFVL VVFGICWAPF HADRVMSV SQWTDGLHLA FQHVHVISI FFYLGSAANP VLYSLMSSRF RETFQEA LCL GACCHRLRPR HSSHLSRMT TGSTLCDVGS LGSWVHPLAG NDGPEAQQT DPS atggtaacc tgcacaaata cactgaaca ttaagatgg gtagcaacag taccagact gctgagatt actgaatg cactaatg aaatttcaat actctctta tgaacacc tatactca taticctta tggctctg gctaacag cagcctgtg ggttctgt cgttcatca gcaagaaaaa taagccalc atttcatga tcaactctc tgggtgtg cttgtcatg tattatctt</p>	P	Homo sapiens
541	161251	Purinergic Receptor P2Y10	NM_014499	<p>atggctgca atggcagtc ggccagggg cacttgacc ctgaggact gaactgact gacgaggcac tgagactcaa gtacctggg cccagcaga cagagctgt catgccalc tggccacat acttgctgat ctctgtgtg ggogctgtg gcaatgggt gacctgtg gcatctgc gccacaagg catggcacg ctaccaact actacctt cagctggcc gtgctggacc tctgtgtgt gctgtgggg cgtccctgg agctatga gatgggac aactacctt tctgtggg cgtgtgtg tctatttc gcagctact gttgagatg tctgtctgg cctcagct caacgtact gccctgagcg tggagagcta tggggcggt ggacccac tccagccag gtccatgtg acggggcc atgtggccg agtctggg ggcgtggg gctgtccat gctgtctc ctgccaca ccagctgca cggcatcgg cagctgcaeg tggctggc ggggccag cagactcag ctgttgcat gctgttcgc ccagggccc tctacaact tgaatgtag accaccggc tctctctt ctgctggcc atggccatca tgaagctgt ctactgtc atggcgctg gactggcg gtagagagctg ctgctatgc agggagccaa ggccagggg tctgcagcag ccaggtccag atacactgc aggtccagc agcagatcg ggggggaga caagtacca agatctgt tctgtgtg tgggtgtg gcatctgt ggcccgct cagcgacc gcgtatgt gagctgtg tccagtgga cagatggct gcacctggc ttccagcac tgcagctat ctccggcatc ttcttacc tggctggc ggccacccc gtgtctata gctctatg cagccgttc cagagacct tccaggtggc cctgtggct gggtgctgt gccatgct cagacccc cagagctcc acagctcag caggtgacc acaggcagca ccctgtga tggggctcc ctggcagct gggtccacc cctggctgg aacgatggc cagaggcgca gcaagagacc gacatctt ga MACNGSAARG HFDPEDLNL DEALRLKYL G PQQTELFMPI CATYLLIFV GAVGNGLTCL VILRHKAMRT PTNYLFLSLA VSDLLVLLVG LPLELYEMWH NYPFLGVGG CYFRILLFEM VCLASVLNVT ALSVERYAV VHPLQARSMV TRAHVRRVLG AVWGLAMLC LPTSLHGR QLVPCRPV PDSA VCMVLR PRALYNMVVQ TTALLFFCLP MAMSVLYLL IGLRLRRERL LLMQEA KGRG SAAARSRYTC RLQHQHRRR QVTKMLFVL VVFGICWAPF HADRVMSV SQWTDGLHLA FQHVHVISI FFYLGSAANP VLYSLMSSRF RETFQEA LCL GACCHRLRPR HSSHLSRMT TGSTLCDVGS LGSWVHPLAG NDGPEAQQT DPS atggtaacc tgcacaaata cactgaaca ttaagatgg gtagcaacag taccagact gctgagatt actgaatg cactaatg aaatttcaat actctctta tgaacacc tatactca taticctta tggctctg gctaacag cagcctgtg ggttctgt cgttcatca gcaagaaaaa taagccalc atttcatga tcaactctc tgggtgtg cttgtcatg tattatctt</p>	A	Homo sapiens

542	161251	Purinergic Receptor P2Y10	NP_055314.1	<p>accctcogg attactiatt acatagcca ccactggcct ttccagagag ccccttgctt gctctgcttc tacttgaagt atctcaaat gtatggcagc atttgcttc tgacgtgcat cagcttcaaa aggtgcttiti ttctctcaa gcccttcagg gccagagagact ggaaagcgtiag gtacgatg ggcacatg cggccatg gatcgctg gggagctgct gttgacatt tccatctg agaagcacag actiaaaca caaagctc tgcctgct atctgggata caagcaaal aatgcagtg cgttggctcg gatgattaca gttgctgagc ttgcaggatt tggatccca gtagcatca tgcagtggtg tactggaaa acclattat ctttgagaca gccaccaatg gctttccaag ggatcagiga gaggcagaaa gcactgcgga tgggttcat gttgctgca gttcttca tctgttca tccatcat attaatita tttttacac catggtaag gaaacatca ttgacgtg tcccgctg cgaatgcac tttattica cctttttg cttgcttg caagtctg ctgcttgg gatcaattc ttattact tatggcttca gatttctg accaactat ccgccatggc agttcttga ccgctcccg cctatgagc aggaagtg gttatcaat gatggctaa</p>	P	Homo sapiens
543	161293	G Protein- Coupled Receptor Ls161293 [Herpes virus]	NP_042597.1	<p>MANLDKYTET FKMGSNSTST AEIYCNVTNV KFQYSLYATT YLIFPGLL ANSAALWVLC RFISKKNKAI IFMNLVAD LAHVLSPLR IYYISHHW FORALCLLCF YLKYLNMYAS ICFLTCISLQ RCFFLLKPER ARDWKRRYDV GISAIIWV GTACLFPIL RSTDLNHNKS CFADLGKQK NAVALVGMIT VAELAGFVP VIIAWCTWK TTISLRQPPM AFQISERQK ALRMVFMCAA VFFICTPYH INFYTMVK ETIISCPVV RIALYFHPFC LCLASLCLL DPILYYFMAS EFRDQSRHG SSVTRSLMS KESGSMIG MATTSATSTV NTSSLATTMT TNFTSLTSTV VTTIASL VPS TNSEDYDD LDDVDYESA PCYKSDTIRL AAQVVPALYL LVFLFGLGN ILVVIIVRY MKIKLNNML LLNLAISDLL FLLTLFWMH YIGMYHDWTF GISLCKLLRG VCYMSLSQV FCILLTVDR YLA VVYAVTA LRRTVTCGI VTCVCTWFLA GLLSLPEFF HGHQDDNGRV QCDDPYPEMS TNVWRRRAHVA KVMLSLILP LLIMAVCYV IIRLLRRPS KKKYKAIRLI FVMVAYFV WTPYNIVLL STFHATLNL QCALSSNLDL ALLITKTAV THCCINPVY AFVGEKFRH LYHFFHTYVA IYLCYIPFL SGDGEKGP TRI</p>	P	Equine herpesviri s 2
544	177147	Neuromedin K Receptor-Like (NK-4R)	NM_006679	<p>gcagaacc cgaatgacc gggccacggc ggtctcccga cctgcgcgt cctgcggcg gcgctgggct cggggcactc gggctggcc cccatggct cggccgggg gaactgagc gcgtggccgg gctgggggtg gccggccgg gccggctga ggaaccigac ctctcccg gccccgaccg cgtcccgct cccggcccg tggggagc cctgcggcg cccggcccg gcgcaccgt tctgcagcc gccctggggc gggcgctct ggtcgtctgg ctacggcgcc gttggggcgg tggcggtgt cggcaacct gttgtgact ggtatggt gggccacaag cgcagcgga cggicacaa ctctcttc gtagactgg ccttcgga cggcgccatg gccggctca acgctggt caacttacc tacggcgcg acggagagtg gtagctggc gccaactat gcccttca gaacttc cccatcaccg ccgtgtgc cagcatctac tccatggc ccatcggt ggacagatc atggccatt ttgacccct gaagccagg ctgtctggca cggccaccgg gatgctatt ggagcatct ggatctggc atttacti gctttctc agttctgta ttcaaatc aaagtatc caggccgtac tcttctac gtagagtg cagaaggctc aaggaacat ttacgtacc acatgact catgctgct gttgtact ttcttct catctggc atcaccata ccatgttg aatcacgctc tgggaggggg agatccagg agacactgc gaacagatc agggcgagct gaagggcaag cggaaaggtg taataatgat gttatcgt gttgtact ttgcactg cggctggccg cttctggc gccatgact caccggc talcagcagc tgaacaggtg gaaatcac cagcaggt acttggcagg cttctggc gccatgact cggacatgta caaccatc atctact gttgataa gagattgt gctggctca agagggtc cgtctggc ctttctac acgtctcag ctacgacgag ctggagctca aagccaccag gctccacca atcgagaga gagccata cacatgaca agatgggt ccatggcgt gttatcgac tccacatg ggagacatgc caggctcact caccagaga gagggagcag cagagagga</p>	A	Homo sapiens

ggcctccaaig tctgtcccg cagggaactcc aagttccact ccaccacagc caggtctgig agctctctcc acalgtcggg
 ggaagaaagg tctgtattc tctgtggggt caagggccact gcaaggccacc ctctctgt cactgtgt cgtctcact cctgtgaaag
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545	177147	Neuromedin K Receptor-Like (NK-4R)	NP_006670.1	<p>ttaataatataaataatcatatgaataat</p> <p>MASPAAGNLSA WPGWGWPPPA ALRNLTSPPA PTASPPAPS WTPSPRPGPA HPFLQPPWAV ALWSLAYGAV VAVAVLGNLV VIWIVLAHKKR MRTVTNSFLV NLAFAADAMA ALNALVNFIY ALHGEWYFGA NYCRFQNFPP ITAVFASIYS MTAIAVDRYM AIDPLKPRP SATATRIVIG SIWILAFLLA FPQCLYSKIK VMPGRILCYV QWPEGSRQHF TYHMIIVLV YCFPLLMGI TYTIVGITLW GGEIPGDTCD KYQEQLKAKR KVKMMIIVV VFAICWLPY HIYFILTAIY QQLNRWKYIQ QVYLASFALA MSSTMYNPII YCCLNKRFPRA GFKRAFRWCP FHVSSYDEL ELKATRLHPM ROSSLTYVTR MESMSVVFDG NDGDSARSSH QKRGITRDVG SNVCSRNSK STSTTASFVS SSHMSVEEGS</p> <p>atggatgaac caggaaatc gacagtaict tctgccat gccatgacac tatgatgac ttccgcaatc aagtgatc caccctgtac tctatgact ctgtgtagg clctttggc aatggctttg tgcctatgt cctataaaa acctatcaca agaagtcagc ctccaagta tacaatgata attagcagc agcagatcta ctgtgtgtgt gcaacatgcc tctccgtgtg gctatattg ttcaaaaagg catttgctc tttggtgact tctgtccg cctcagcacc tatgtctgt atgcaacct ctatgtgac atctctta tgacagccat gacttttc cgggtgcatg caattgttt tccagtcag aacataatt tgggtacaca gaaaaaagcc aggtttgtgt ggttaggtat ttgatttt gtgatttga ccagttcc attciaatg gccaaaccac aaaaagatga gaaaaataat accaagctct ttgagccccc acaagacaat caaactaaaa atcatgttt ggctgtgcat tatgtgtat tggttgtg cttatcact cctttgtta ttaataattg ctgtiacaca atgataatt tgaccttact aaaaaataca atgaaaaaaa atcgtcaag tcaaaaaag gctataggaa tgaatgtgt cgtgacccgt gcccttttag tgaattcat gccatcatat altcaacgtia ccatcact tcatittia cacaatgaaa ctataccctc tgatctgtc cttagaatgc agaagtcctt ggtcataacc ttgtctgtg ctgcatcaaa ttgtgtctt gacccctcc tatattct ttctgggtt aacttagga aaaggctgtc tacattcaga aagcattcti tgcacagct gactatgta cccagaaaga aggcctctt gccagaaaaa ggaagaaga tatgtaaatg atag</p> <p>MDETGNLTVS SATCHDTIDD FRNQVYSTLY SMISVVGFFG NGFVLVLIK TYHKSAFQV YMINLA VADL LCVCITPLRV VYYVHKGIWL FGDFLCRLST YALYVNL YCS IFFMTAMSF RCIAIVFPVQ NINLVTQKKA RFVVCVGIWF VLTSSPFLM AKPQKDEKNN TKCFEPQDN QTKNHVLVLH YVSLFVGFII PFVIIVCYT MIULTLLKKS MKKNLSSHKK AIGMMVMTA AFLVSFMPYH IQRTHLHFL HNETKPCDSV LRMQKSVVIT LSLAASNCFF DPLLFFSSG NFRKRLSTFR KHSLSSTVTV PRKKASLPEK GEEICKV</p> <p>ccacg-gtcc gccggctga cggctgacc ggacagcggct caggctccg ctctctcc gctgacagc cagcgtgcc ggccccactg ggctcgatc cggcccccgg cccctggga cccgtctgtc tggcccccgg cccggccccg cggaccatgc gctggccgccc ccaaggaggaa acccgaccgg gccagggccc cgcanaagacg agctctccgg gccggggccc ctcccggccc ccagctctc ggccggcggc ctgccccgg tcccggagcc gcgtgagcct gcggggcccat ggagcgcgcg ccggccgacg ggccgctgaa cgttcggggg gcgtcggcgg gcgattgcgg ggccggcggg gggtgcgcgc gctctcggc agcctggacc gggtgtctgg ccgcgctcat ggctgtctc atcgtggcca cgggtctgg caacgcgcgc gctatgtcgc cctcgtggc cgactgagc ctccgcaacc agaaacti ctctctgtc aacctgcca tctccgacti cctcgtggc gcccttgc tcccactga tgaacctac gtgctgacag gcgctgtggac ctccggccgg ggctctgca agctgtgctt ggtatgggac tacctgtgt gcaacctc tgccttaac atcgtgtca tcaatgaga ccgtctctc tgggtaccc gagcgtctc ataccggccc cagcaggggg acagcgggg ggacgtgcgg aagatctgc tgggtgggt gctggcttc ctgtgtacg gaccagccat cctgagctgg ggtatctgt cggggggcag ctccatcccc gagggccact gctatgcga gttcttctac</p>	P	Homo sapiens
546	177168	Cysteinyl Leukotriene CYSLT1 Receptor	NM_006639	<p>atggatgaac caggaaatc gacagtaict tctgccat gccatgacac tatgatgac ttccgcaatc aagtgatc caccctgtac tctatgact ctgtgtagg clctttggc aatggctttg tgcctatgt cctataaaa acctatcaca agaagtcagc ctccaagta tacaatgata attagcagc agcagatcta ctgtgtgtgt gcaacatgcc tctccgtgtg gctatattg ttcaaaaagg catttgctc tttggtgact tctgtccg cctcagcacc tatgtctgt atgcaacct ctatgtgac atctctta tgacagccat gacttttc cgggtgcatg caattgttt tccagtcag aacataatt tgggtacaca gaaaaaagcc aggtttgtgt ggttaggtat ttgatttt gtgatttga ccagttcc attciaatg gccaaaccac aaaaagatga gaaaaataat accaagctct ttgagccccc acaagacaat caaactaaaa atcatgttt ggctgtgcat tatgtgtat tggttgtg cttatcact cctttgtta ttaataattg ctgtiacaca atgataatt tgaccttact aaaaaataca atgaaaaaaa atcgtcaag tcaaaaaag gctataggaa tgaatgtgt cgtgacccgt gcccttttag tgaattcat gccatcatat altcaacgtia ccatcact tcatittia cacaatgaaa ctataccctc tgatctgtc cttagaatgc agaagtcctt ggtcataacc ttgtctgtg ctgcatcaaa ttgtgtctt gacccctcc tatattct ttctgggtt aacttagga aaaggctgtc tacattcaga aagcattcti tgcacagct gactatgta cccagaaaga aggcctctt gccagaaaaa ggaagaaga tatgtaaatg atag</p> <p>MDETGNLTVS SATCHDTIDD FRNQVYSTLY SMISVVGFFG NGFVLVLIK TYHKSAFQV YMINLA VADL LCVCITPLRV VYYVHKGIWL FGDFLCRLST YALYVNL YCS IFFMTAMSF RCIAIVFPVQ NINLVTQKKA RFVVCVGIWF VLTSSPFLM AKPQKDEKNN TKCFEPQDN QTKNHVLVLH YVSLFVGFII PFVIIVCYT MIULTLLKKS MKKNLSSHKK AIGMMVMTA AFLVSFMPYH IQRTHLHFL HNETKPCDSV LRMQKSVVIT LSLAASNCFF DPLLFFSSG NFRKRLSTFR KHSLSSTVTV PRKKASLPEK GEEICKV</p> <p>ccacg-gtcc gccggctga cggctgacc ggacagcggct caggctccg ctctctcc gctgacagc cagcgtgcc ggccccactg ggctcgatc cggcccccgg cccctggga cccgtctgtc tggcccccgg cccggccccg cggaccatgc gctggccgccc ccaaggaggaa acccgaccgg gccagggccc cgcanaagacg agctctccgg gccggggccc ctcccggccc ccagctctc ggccggcggc ctgccccgg tcccggagcc gcgtgagcct gcggggcccat ggagcgcgcg ccggccgacg ggccgctgaa cgttcggggg gcgtcggcgg gcgattgcgg ggccggcggg gggtgcgcgc gctctcggc agcctggacc gggtgtctgg ccgcgctcat ggctgtctc atcgtggcca cgggtctgg caacgcgcgc gctatgtcgc cctcgtggc cgactgagc ctccgcaacc agaaacti ctctctgtc aacctgcca tctccgacti cctcgtggc gcccttgc tcccactga tgaacctac gtgctgacag gcgctgtggac ctccggccgg ggctctgca agctgtgctt ggtatgggac tacctgtgt gcaacctc tgccttaac atcgtgtca tcaatgaga ccgtctctc tgggtaccc gagcgtctc ataccggccc cagcaggggg acagcgggg ggacgtgcgg aagatctgc tgggtgggt gctggcttc ctgtgtacg gaccagccat cctgagctgg ggtatctgt cggggggcag ctccatcccc gagggccact gctatgcga gttcttctac</p>	A	Homo sapiens
547	177168	Cysteinyl Leukotriene CYSLT1 Receptor	NP_006630.1	<p>atggatgaac caggaaatc gacagtaict tctgccat gccatgacac tatgatgac ttccgcaatc aagtgatc caccctgtac tctatgact ctgtgtagg clctttggc aatggctttg tgcctatgt cctataaaa acctatcaca agaagtcagc ctccaagta tacaatgata attagcagc agcagatcta ctgtgtgtgt gcaacatgcc tctccgtgtg gctatattg ttcaaaaagg catttgctc tttggtgact tctgtccg cctcagcacc tatgtctgt atgcaacct ctatgtgac atctctta tgacagccat gacttttc cgggtgcatg caattgttt tccagtcag aacataatt tgggtacaca gaaaaaagcc aggtttgtgt ggttaggtat ttgatttt gtgatttga ccagttcc attciaatg gccaaaccac aaaaagatga gaaaaataat accaagctct ttgagccccc acaagacaat caaactaaaa atcatgttt ggctgtgcat tatgtgtat tggttgtg cttatcact cctttgtta ttaataattg ctgtiacaca atgataatt tgaccttact aaaaaataca atgaaaaaaa atcgtcaag tcaaaaaag gctataggaa tgaatgtgt cgtgacccgt gcccttttag tgaattcat gccatcatat altcaacgtia ccatcact tcatittia cacaatgaaa ctataccctc tgatctgtc cttagaatgc agaagtcctt ggtcataacc ttgtctgtg ctgcatcaaa ttgtgtctt gacccctcc tatattct ttctgggtt aacttagga aaaggctgtc tacattcaga aagcattcti tgcacagct gactatgta cccagaaaga aggcctctt gccagaaaaa ggaagaaga tatgtaaatg atag</p> <p>MDETGNLTVS SATCHDTIDD FRNQVYSTLY SMISVVGFFG NGFVLVLIK TYHKSAFQV YMINLA VADL LCVCITPLRV VYYVHKGIWL FGDFLCRLST YALYVNL YCS IFFMTAMSF RCIAIVFPVQ NINLVTQKKA RFVVCVGIWF VLTSSPFLM AKPQKDEKNN TKCFEPQDN QTKNHVLVLH YVSLFVGFII PFVIIVCYT MIULTLLKKS MKKNLSSHKK AIGMMVMTA AFLVSFMPYH IQRTHLHFL HNETKPCDSV LRMQKSVVIT LSLAASNCFF DPLLFFSSG NFRKRLSTFR KHSLSSTVTV PRKKASLPEK GEEICKV</p> <p>ccacg-gtcc gccggctga cggctgacc ggacagcggct caggctccg ctctctcc gctgacagc cagcgtgcc ggccccactg ggctcgatc cggcccccgg cccctggga cccgtctgtc tggcccccgg cccggccccg cggaccatgc gctggccgccc ccaaggaggaa acccgaccgg gccagggccc cgcanaagacg agctctccgg gccggggccc ctcccggccc ccagctctc ggccggcggc ctgccccgg tcccggagcc gcgtgagcct gcggggcccat ggagcgcgcg ccggccgacg ggccgctgaa cgttcggggg gcgtcggcgg gcgattgcgg ggccggcggg gggtgcgcgc gctctcggc agcctggacc gggtgtctgg ccgcgctcat ggctgtctc atcgtggcca cgggtctgg caacgcgcgc gctatgtcgc cctcgtggc cgactgagc ctccgcaacc agaaacti ctctctgtc aacctgcca tctccgacti cctcgtggc gcccttgc tcccactga tgaacctac gtgctgacag gcgctgtggac ctccggccgg ggctctgca agctgtgctt ggtatgggac tacctgtgt gcaacctc tgccttaac atcgtgtca tcaatgaga ccgtctctc tgggtaccc gagcgtctc ataccggccc cagcaggggg acagcgggg ggacgtgcgg aagatctgc tgggtgggt gctggcttc ctgtgtacg gaccagccat cctgagctgg ggtatctgt cggggggcag ctccatcccc gagggccact gctatgcga gttcttctac</p>	P	Homo sapiens
548	177191	Histamine H3 Receptor	NM_007232	<p>atggatgaac caggaaatc gacagtaict tctgccat gccatgacac tatgatgac ttccgcaatc aagtgatc caccctgtac tctatgact ctgtgtagg clctttggc aatggctttg tgcctatgt cctataaaa acctatcaca agaagtcagc ctccaagta tacaatgata attagcagc agcagatcta ctgtgtgtgt gcaacatgcc tctccgtgtg gctatattg ttcaaaaagg catttgctc tttggtgact tctgtccg cctcagcacc tatgtctgt atgcaacct ctatgtgac atctctta tgacagccat gacttttc cgggtgcatg caattgttt tccagtcag aacataatt tgggtacaca gaaaaaagcc aggtttgtgt ggttaggtat ttgatttt gtgatttga ccagttcc attciaatg gccaaaccac aaaaagatga gaaaaataat accaagctct ttgagccccc acaagacaat caaactaaaa atcatgttt ggctgtgcat tatgtgtat tggttgtg cttatcact cctttgtta ttaataattg ctgtiacaca atgataatt tgaccttact aaaaaataca atgaaaaaaa atcgtcaag tcaaaaaag gctataggaa tgaatgtgt cgtgacccgt gcccttttag tgaattcat gccatcatat altcaacgtia ccatcact tcatittia cacaatgaaa ctataccctc tgatctgtc cttagaatgc agaagtcctt ggtcataacc ttgtctgtg ctgcatcaaa ttgtgtctt gacccctcc tatattct ttctgggtt aacttagga aaaggctgtc tacattcaga aagcattcti tgcacagct gactatgta cccagaaaga aggcctctt gccagaaaaa ggaagaaga tatgtaaatg atag</p> <p>MDETGNLTVS SATCHDTIDD FRNQVYSTLY SMISVVGFFG NGFVLVLIK TYHKSAFQV YMINLA VADL LCVCITPLRV VYYVHKGIWL FGDFLCRLST YALYVNL YCS IFFMTAMSF RCIAIVFPVQ NINLVTQKKA RFVVCVGIWF VLTSSPFLM AKPQKDEKNN TKCFEPQDN QTKNHVLVLH YVSLFVGFII PFVIIVCYT MIULTLLKKS MKKNLSSHKK AIGMMVMTA AFLVSFMPYH IQRTHLHFL HNETKPCDSV LRMQKSVVIT LSLAASNCFF DPLLFFSSG NFRKRLSTFR KHSLSSTVTV PRKKASLPEK GEEICKV</p> <p>ccacg-gtcc gccggctga cggctgacc ggacagcggct caggctccg ctctctcc gctgacagc cagcgtgcc ggccccactg ggctcgatc cggcccccgg cccctggga cccgtctgtc tggcccccgg cccggccccg cggaccatgc gctggccgccc ccaaggaggaa acccgaccgg gccagggccc cgcanaagacg agctctccgg gccggggccc ctcccggccc ccagctctc ggccggcggc ctgccccgg tcccggagcc gcgtgagcct gcggggcccat ggagcgcgcg ccggccgacg ggccgctgaa cgttcggggg gcgtcggcgg gcgattgcgg ggccggcggg gggtgcgcgc gctctcggc agcctggacc gggtgtctgg ccgcgctcat ggctgtctc atcgtggcca cgggtctgg caacgcgcgc gctatgtcgc cctcgtggc cgactgagc ctccgcaacc agaaacti ctctctgtc aacctgcca tctccgacti cctcgtggc gcccttgc tcccactga tgaacctac gtgctgacag gcgctgtggac ctccggccgg ggctctgca agctgtgctt ggtatgggac tacctgtgt gcaacctc tgccttaac atcgtgtca tcaatgaga ccgtctctc tgggtaccc gagcgtctc ataccggccc cagcaggggg acagcgggg ggacgtgcgg aagatctgc tgggtgggt gctggcttc ctgtgtacg gaccagccat cctgagctgg ggtatctgt cggggggcag ctccatcccc gagggccact gctatgcga gttcttctac</p>	A	Homo sapiens

549	177191	Histamine H3 Receptor	NP_009163.1	<p> aacttggtact tctcatcac ggcctccacc ctggaggttct ttacggcctt cctacagctc accttttta acctcagcat ctacttgaac atccagagggc gaccccgctt ccggcttggat ggggctcggag aggcagccgg ccccgagccc cctccggagg cccagccctc accaccccca ccgccttggct gcttgggctt ctgggagag aggcagaggg aggcacatggc gcttgcacagg ttatgggttgg gttggggggc cgtatggcgtt gaggccggggg aggcagacct ctgggggttggc ggttgggttggc gctccgttggc ttacccacc tcacgtccg gcaagtcttc gagggggcat gaggagccgc gctacataa gagggggctcc aagccgtcgg cgtctcggc ctcgttggag aagggcatga agatgtgttc ccagagcttc acccagcgtt ttggctgttc tggggacagg aaggttggcca agtcgttggc cgtatcgtg agcatcttg ggccttggc gggcccatc agcgttgcga tgaatccg gggccgctgc cattggccact gcttccctga ctactgttac gaaacctt ctgtgtctt gttgggccaac tgggtgttga acctgtctt ctacccttg tggccacaca gcttccggcg ggccttccac aagcttctt gggccagaa gctcaaaac cagcccccaca gtcccttggg gacatgtctg aagtgttggg cccacagag cctccctcag cccagcctct ctacggccag gctcttggg catctggccc tgcctggccc taccggctc gttcccccag ggttggagccc cgcctgtctt gttggccctt cttaatggca cggcagggcac cctggccatgg agggccttc ctgggttggc cagagggggc ctacgtgtctt ggcacttggc ggcacttggg cttgggttggc ggccctggcc cccatctt ggcctacc ggttccacg gggaggggaca gcttggaggt cccagacatg ctggccacc cctgttggg cccacccctt gcagttact gttgtgttc ttccaaagc aagcacttgg gttgttcca ggttcttc cctagcagtt tgccttggca cgttgcacaca cctgcacacc cctgcacaca cctgcacacc gttccctcc caccactt ccttggcccc aaaaagtcca agggggcccta ccttctgt ctgtcataag cctcaggctt gggcccttca ccccttcc caccactt ccttggcccc aaaaagtcca agggggcccta ggaaacctga agctgttct tgccttcca ttctgggtt ttccagaaag atgaaagaa aaacatgtct gttgaactga tttcttggg agtthaac aagagagaca aaattctga ggaactcagg gcttggatgg caggttggg cctccagccc cttccctc cgttaaggct tccggcttgg cttgtccagc tgccttcc caccggct ctgggttcc accagccctt gttggccagg ctggccggc cacttctt gctcaccag gaccttgg ggttggg aggttggg aggttggg cctggcttggc cctgggttcc caagggttgc aggggggct cagagagaggt gcccggggcag gggccggctt gcatgtgtt gtcacccgt ggcacagcgt ctgcaltc cttgtctgt gcccgttgc cttgccttga aaccgttgg tcaataaa gttgtt ttataaaaaa aaaaaaaaa aaaaaaa MERAPDGPL NASGALAGDA AAAGGARGFS AAWTAVLAAL MALLIVATVL GNALVMLAFV ADSSLRTQNN FLLNLAISD FLVGAFCLP YVPVLTGRW TFGRGLCKLW LVVDYLLCTS SAFNIVLSY DRFLSVTRAV SYRAQQGDTR RAVRKMMLLVW VLAFLLYGPA ILSWEYLSGG SSIEGHGYA EFFYNWYFLI TASTLEFFTP FLSVTFNLS IYLNQRRTR LRLDGAEEA GPEPPPEAQP SPppPGCWG CWQKGHGEAM PLHRYGVGEA AVGAEEAT LGGGGGGSV ASPTSSSGSS SRGTERPRSL KRGSKPSASS ASLEKRMKMV QSFTQRFRL SRDRK VAKSL AVVSIFGLC WAPYTLMLII RAACHGHCV DYWYETSWL L WANSVNPV LYPLCHHSFR RAFTKLLCPQ KLKIQPHSSL EHCWK agggggcgtt gccctgacc gacgggtaic agccgtctt cccctccac cccagagaga catgaacag cagggccagg gagctctc ctggggctc tgcattccc catcttggc tctgggtag gcccagggag gagacccc caacctat ccgttctgc ctggagaaa gagactgcc ttccatgcc ctgagtgg ggcctggggc caggttgcgt gttcccca agggcaagg tctctgtt gaggagggg gctgtcagc caaactt ttctctga ggcgccalc tccctctg caccctgcaa ttccacccc ttccattha ttcccttgg cccgcgaca gttccctt gttcttcc gggattcagg cctccctcc tgacatggag agtaacctgt ctggccttgg gctgtctgg cttgggttgc accctgtg accctggggc tgacagctgc ctacacacc ctgtagccc tgccttctt cttccctat gcccagctt ggttgggtt tctgtatgg cacaagctc tcagctatca gacgttgtt ctggccctt gttgtctt ggcggcctt cgtaccaccc tcttctt ctactccga galactccc </p>	P	Homo sapiens
550	177387	G Protein- Coupled Receptor ORF4	NM_020155	<p> agggggcgtt gccctgacc gacgggtaic agccgtctt cccctccac cccagagaga catgaacag cagggccagg gagctctc ctggggctc tgcattccc catcttggc tctgggtag gcccagggag gagacccc caacctat ccgttctgc ctggagaaa gagactgcc ttccatgcc ctgagtgg ggcctggggc caggttgcgt gttcccca agggcaagg tctctgtt gaggagggg gctgtcagc caaactt ttctctga ggcgccalc tccctctg caccctgcaa ttccacccc ttccattha ttcccttgg cccgcgaca gttccctt gttcttcc gggattcagg cctccctcc tgacatggag agtaacctgt ctggccttgg gctgtctgg cttgggttgc accctgtg accctggggc tgacagctgc ctacacacc ctgtagccc tgccttctt cttccctat gcccagctt ggttgggtt tctgtatgg cacaagctc tcagctatca gacgttgtt ctggccctt gttgtctt ggcggcctt cgtaccaccc tcttctt ctactccga galactccc </p>	A	Homo sapiens

551	177387	G Protein-Coupled Receptor ORF4	NP_064540.1	<p>ggcccaaccg cctggggccc ttgccctctt ggcttctcta ctgctggccc gtcgtctgc agttctcac ctgagcgtt atgaacctct actttgcccc ggttggtgtc aagcccaagg tgaagctgc gccggcagtg agccagagct tgcctgctgt ccgagggggc tttgtgggg cctgcgtgct ctttctctg gtaacgtgc tgggtgctgt gctctccat cggcgccgac agccctgggc cctgctgctt gcccgcctc tgggagcga cctctgtc gcatctgc cgtctctct tgcctgctgc cctgctcgc tcgccagcgg ggccctcca ctacalcia cctggaggcc aaggttaggc tgcagcactg atgccaggt gcttttggg tctctggca gggttctca gggtagag</p> <p>MESNLSGLVP AAGLVPALPP AVTLGLTAAY TTL YALLFFS VYAQLWLVL YGHKRLSYQT VFLALCLLWA ALR TILFSFY FRDTPRANRL GPLFWLLYC CPVCLQFFTL TLMNLYFAQV VFKAQVRRP EMSRGLLA VR GAFVGASLLF LLVNVLC AVL SHRRAPQWAL LLVRVLVSDS LFVICALSLA ACLCLVASGR PPLASTWRPR</p>	P	Homo sapiens
552	180956	Lysophosphatidic Acid Receptor Edg7	NM_012152	<p>cttcttaaa ttcttcta ggaattcac ttcttcca caatgaatga ggtcactat gacaagaca tggactttt tataatagg agcaacactg alacttga tgcattgaca ggaacaaagc ttgtattgt ttgtgtgtt gggacgttt tctgctgtt tatttttt tctaatttc tggatcgc ggcagtgatc aaaaacagaa aatttcatt ccccttctac taccgttgg ctaatttgc tgcgtccgat ttctgcctg gaattgccia tglattccg atgttaaca caggccaggt ttcaaaact ttgactgtca accgttgggt tctccgtcag gggtcttgg acagttagctt gactgtcc ctaccaact tgcgtgtat cgcgtggag aggcacatgt caatcatgag gattcgggtc catagaacc tgaacaaaaa gaggttga ca ctctcatt ttgtgtgtc tggccatcgc attttatgg ggcggtccc cacatgggc tggatgcc tctgcaaat ctctgctgc tcttccctgg ccccattha cagcagaggt tacctgttt tctggacagt gtccaactc alggccttc tcatlgtgt tgggtgtac ctgcggatct acgtgtacgt caagagagaaa accaactct tgcctcga tacaagtggg tccatcagcc gccggagagc accatgaag ctaatgaaga cgggtatgac tgtcttaggg gcttttgg tatgtctgc cccgggctg ggttttgc tctcagcgg cctgaactgc aggcagtggt gctgagca tggaaagg tggctctgc tgcgtgcgt gctcaactc gctgaact ccatcatcta ctctacaag gacgagga tgdttggc catgaagag atgactgct gcttctca ggaagaacca gagaggcgc cctctgcgt ccccccca gctctaga ggaatgac aggcagcagc tacaagagc atagttag ccaagggtga gctgcaata aaagcactc claaactg gatcctc ggccacca ggtatgact gcttagg</p> <p>MNECHYDKHM DFFYNRSNTD TVDDWTGTL VVLCVGTFF CLFIFFSNLS VIAAVIKNRK FHFFYYLLA NLAAADFFAG IAYVFLMFNT GPVSKILT VN RWFLRQGLD SSLTASLTNL LVIAVERHMS IMRMVRVHSNL TKKRVTLLL LVWAIAFMG AVPTLGNL CNISACSSLA PIYSRYL VF WTVSNLMAFL IMVVYLR YVVKRKTNL SPTSGSISR RRTPMKLMKT VMTVLGAFV CWTPGLVLL LDGLNCRQCG VQHVKRWFL LALLNSV VNP IYSYKDEDM YGTMMKMICC FSQENPERP SRIPSTVLSR SDTGSQYIED SISQGAVCNK STS</p>	A	Homo sapiens
553	180956	Lysophosphatidic Acid Receptor Edg7	NP_036284.1	<p>alggggcccg gcgagcgct gctggcggt cttctgtga tggactggc cgtggcgtc ctatcaacg cactgtgct gctttgtc gctacagcg ctgagctcg cactgagcc tcaaggctc tctgtgtga tctgtcttg ggcacctgc tgcgtggcg gctgacatg ccttcacg tgcctgtgt gatggcggg ggaacacgt cggcgcccg cgcattgcca gtcattggct tctggacac ctcttggcg tccaacggcg cgtgagcgt ggcggcgctg agcgagacc agtggctggc agtgggctc ccactgct acgcccggcg cctgcgacg cgtatgccc gccctgctt gggctgtgccc tggggacagt cgttggctt ctacggcgt gacttggct gctctggct tggctacagc agcgcttgc cgtctgttc gctgctg cgcccgagc ctgagcgct gccttgcga gcttaccg ccactacc tgcctgggc ttcgtgtgc cgttggcgt gcttgcct accctgctc aggtgacgg ggtggcagc agacactgcc accgttcca caccgtcacc atgaaggcgc</p>	P	Homo sapiens
554	189873	G Protein-Coupled Receptor GPR78	AF411107	<p>alggggcccg gcgagcgct gctggcggt cttctgtga tggactggc cgtggcgtc ctatcaacg cactgtgct gctttgtc gctacagcg ctgagctcg cactgagcc tcaaggctc tctgtgtga tctgtcttg ggcacctgc tgcgtggcg gctgacatg ccttcacg tgcctgtgt gatggcggg ggaacacgt cggcgcccg cgcattgcca gtcattggct tctggacac ctcttggcg tccaacggcg cgtgagcgt ggcggcgctg agcgagacc agtggctggc agtgggctc ccactgct acgcccggcg cctgcgacg cgtatgccc gccctgctt gggctgtgccc tggggacagt cgttggctt ctacggcgt gacttggct gctctggct tggctacagc agcgcttgc cgtctgttc gctgctg cgcccgagc ctgagcgct gccttgcga gcttaccg ccactacc tgcctgggc ttcgtgtgc cgttggcgt gcttgcct accctgctc aggtgacgg ggtggcagc agacactgcc accgttcca caccgtcacc atgaaggcgc</p>	A	Homo sapiens

555	189873	G Protein- Coupled Receptor GPR78	CAC34041.1	<p>tcgcctgctt cgcgcacgtt caccacgttgc tgcggcagcg ctgcctcalt cagcagaagc ggccgcgcca ccgcgccacc aggaaatgtt gcatgtctat tgcgaccltc ctcattgtct ttgcocccgt tgcrtacacc aggtctgcgg agctcgtgcc cttcgtacc gtaacgccc agtggggcat cctcagaag tgcctgacct acagcaaggc ggtggccgac ccgttcacgt actcttgt ccgcggccg ttccgccaag tctggccgg catgtgtcac cggctgtcga agagaaaccc ccgcgccagca tcaccatg acagctctt ggaatggcc ggcatgggc accagctgtt gaagagaacc ccgcggccag cgtccacca caaggtctt gtagacacag agaalgtatc ctgcctgcag cagacacct ga MGPGEALLAG LLVMVLAVAL LSNALVLLCC AYSAELRTRA SGVLLVNL SL GHLLAALDM PFTLLGVMRG RTPSAPGACQ VIGFLDTFLA SNAALSVAAL SADQWLAVGF PLRYAGRLRP RYAGLLGCA WGQSLAFSGA ALGCSWLGY S SAFASCSRL PPEPRPRFA AFTATLHAVG FVLPLAVLCL TSLQVHRVAR RHCQRMDTVT MKALALLADL HPSVRQRCCLI QQKRRRHRAT RKIGIAIATF LICFAPYVMT RLAEIVPFVT VNAQWGILSK CLTYSKAVAD PFTYSLLRP FRQVLAGMVH RLLKRTPRPA STHDSSLDVA GMVHQLLKRT PRPASTHNGS VDTENDSCLQ QTH</p>	P	Homo sapiens
556	189874	Neuromedin U Receptor 2	NM_020167	<p>atggaaaac ttcaaatgc ttcttgatc taccagcaga aactagaaga tccaltccag aaacacctga acagcacga ggagtatctg gccttctctt gggaccctcg ccgcagccac ttctctccc ccgtgtctgt gggtatgtg ccaattttg tgggggggt cattggcaat gctctgggtt gcttgggtat tctgcagcac caggctatga agagccccc caactactac ctctcagcc tggcggcttc tgacctctg gctctgccc ttggaaatgcc cctggaggctc taigagatgt ggcgcaacta cctttcttg ttcggcccg tgggtgctc ctcaagacg gccctcttg agaccgtgtg ctccgctcc atctcagca tcaccacct cagcgtggag cgtctacgtgg ccatctaca cccgttcgc gccaaatgc agagcacccc gcgcggggcc ctacagatcc tcggcatgt cggggcttc tccgtgtct tctcttgcc caacaccagc atccatgcca tcaagtcca ctctcccc aatgggtccc tggccacgg ttggccacc tgaaggcca tcaagcccat gtagatctac aattcatca tccaggtcac ctcttctta ttctacctc tcccatgac tgcatacgt gctctact acctcagtc actcagatga aagaagaca aatctctga ggcaagaa gggaatgcaa atattcaag acccigcaga aatcagica acaagatgt gttctgtg gctatgtgt ttggtccccc ttccacatg accgactct ctacgttt gggaggagt ggagtgaatc cctggctgtt ggttcaacc tgcctcatgt ggtgtcaggt gtcttctct acctgagctc agctgcaac cccattatct ataacctact gctcgcgcg ttccaggcag catccagaa tggatctct tcttccaca aacagtggca ctccagcat gaocacagt tgcacctgc ccagcggaac atcttctga cagaatgcca ctttggag ctgaccgaag atataggcc ccaattccca tgcagcat ccatgacaa ctctaccct ccaacagccc tctatgga acagatga agacaaact atcaagctt ccaattaac aaaaactga</p>	A	Homo sapiens
557	189874	Neuromedin U Receptor 2	NP_064552.1	<p>MEKLQNASWI YQKLEDPFQ KHLNSTEYL AFLCGPRRSH FFLPVSVVYV PIFVVGIVGN VLCLVILQH QAMKTPINY LFSLAVSDDL VLLGMPLEV YEMWRNYPFL FGPVGCYFKT ALFETVCFAS ILSITTVSVE RYVAILHPFR AKLQSTRRA LRILGIVWGF SVLFSLPNTS IHGKFHYFP NGSLVPGSAT CTVKPMWY NFIIQVTSF FYLLPMTVIS VLYLMLALRL KDKSLEADE GNANIQRPCR KSVNKMFLVL VLVAICWAP FHIDRLFFSF VEEWSESLAA VFNLVHVVS G VFFYLSSAVN PIYNLLSRR FQA AFQNVIS SFHKQWHSQH DPQLPPAQRN IFLTECHFVE LTEDIGPQFP CQSSMHNSHL PTALSSEQMS RTNYQSFHN KT</p>	P	Homo sapiens
558	189884	G Protein- Coupled Receptor	LG94108	<p>atgtggcag ctgcctttgc agactctaac tccagcagca tgaatgtgtc cttgtctcac ctccatttg ccgaggga cctgcctct gattccagg actggagaac catcatcccg gctctctgg gctctgtgtg cctgtgtgtg ttcgtgggg accgtgtgtg</p>	A	Homo sapiens

Ls189884

559 189884 G Protein- ENSMPRT1140 P Homo
Coupled Receptor 67 sapiens
Ls189884

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tgttaaalag

560 189895 G Protein- NM_031936 A Homo
Coupled Receptor GPR61 sapiens

atggagtct caccatccc ccagtcalca gggaactctt ccatttggg gagggtccct caaacccag gtcctctac
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tcaggggcag atag

561 189895 G Protein- NP_114142.1 P Homo
MESSPIQSS GNSSTLGRVP QTPGPSTAG VPEVGLRDVA SESVALFFML

Coupled Receptor GPR61	sapiens	LLDLTAVAGN AAVMAVIKAT PALRKVFVVF HLCLVDLLAA LTLMLPLAML SPALFDHALF GEVACRLYL LSVCFVSLAI LSVSAINVER YYYVHVPMRY EVRMTLGLVA SVLVGVVWKA LAMASVPVLG RVSWEEGAPS VPPHCSLQWS HSAYCQLFVV VFAVL YFLP LLLILLVYCS MFRVARVAAM PDGPLPTWME TPQRSESL SRSTMVTS SGAPQTPHRTF GGGKAAVLL AVGGQFLLCW LPYFSHLVY ALSAQPISTG QVESVVTWIG YFCFTSNPFF YGCLNRQIRG ELSKQFVCF KPAPEEELRL PSREGSIEEN FLQFLTGTG PSESWVSRPL PSPKQEPPEAV DFRIQAR	A	Homo sapiens
189900	NM_030760	atggagatcg ggcgtctgc ggcggcgccg gtagcgagg tcatgtct gcatataac tacacggga agctccgcgg tgcgcgtac cagccggggc cggccctgcg cgcgaagcc gtaggtgccc tggcgtgtag cgccttcatc gtagtagaga atctagccgt gtaggtgtag ctaggagcc accgcgctt ccacgtccc atgtctgc tcttgggtag cctacgtg toggatctgc tggcaggcgc cgcctacgccc gccacatcc tactgtaggg gccctcag ctagaactgt ccccgccgt ctggtagca cgggagggag ggcgtctgt ggcactact ggcctcgtc ttagctctt ggcctcgtc ctaggagcgca ggctcaccat ggcgcgcagg ggcggcgccg ccgtctcag tggggggcgc agcgtggcga tggcaggcgc ggcctggggc gtagctgc tctcgggct ctagcaggc ctagggctgga atggctggg tgcctgggac gcttgctcca ctgtctgccc gctctagccc aaggcctacg tgcctctg cgtgctgccc ttgtagggca tcttggcgc gactgtagca ctctagcgc gcatctacg ccaggtacgc gccaacgc ggcgcctgccc ggcacggccc ggcactgagg ggcacacac ggcggggc cgtgcgaagc cgcgtctgct ggcctgctg cgcacgctca ggcgtggtgt ccttggcctt gtaggtgctt ggcggccc cttcctgctg cgtgctgc agtggcgctg cccggcgcc accgtctgct tactctgca ggcggatccc ttctgggac tggccatggc caactact ctagaaccac tcatctac gctaacac cgcgacatgc ggcacgcgt cctgcccctg gctgctgc gacgcacac ctagggcaga gaccgagtg gctccagca gtcggcgagc ggcgttaggg cttcggggg cctgcgcgc tgcctgccc cgggcttga tgggagctc agcggctcgg agcgtcag cgcacgcgc gacgggctg acacaggg ctagcagg agcccggtg caccacag cgcgggact ctagtagc agcggcgc agcgtg MESGLLRPAP VSEVIVHYN YTKLRGARY QPAGLRADA VVCLAVCAFI VLENLAVLLV LGRHPRFAP MFLLLGSLTL SDLLAGAAYA ANILLSGPLT LKLSPALWFA REGGVFVALT ASVLSLLAIA LERSLTMARR GPAPVSSRGR TLAMAAAWG VSLLLGLLPA LGWNLGRLD ACSTVLPYA KAYVLCVLA FVGILAAICA LYARYCQVR ANARRLPAR GTAGTTSTRA RRPRLALL RTL SVLLAF VACWGPFLL LLLD VACPAR TCPVLLQADP FLGLAMANSI LNPIHTLTIN RDLRHALLRL VCCGRHSCGR DPSSGQSAS AAEASGGLRR CLPPGLDGSF SGSESSPQR DGLDTSSTG SPGAPTAART LVSEPAAD	A	Homo sapiens
562	189900	Sphingolipid Receptor Edg8.	NP_110387.1	Homo sapiens
563	189900	Sphingolipid Receptor Edg8	NP_110387.1	Homo sapiens
564	189901	G Protein- Coupled Receptor Ls189901 (HEOAD54)	LG94029	Homo sapiens
				A
				Homo sapiens

565	189901	G Protein- Coupled Receptor Ls189901 (HEOAD54)	CAC38933.1	ggccaccgg gcagctggcc ccacgggaagc acggctcagc acgttggtggg gcigcaccac cticaggtag cgttgtagtg cgatggctgt gaggaagaca acgttgccg tgcgttggtt ggacagcatg aagaggttga ctttgagggc agcagcccca aagcgocagg tctcatggag gaggttagtag tccacggga gggcgacgtt gctgacagg aggaagtcag cggccaccag gctgaccagg aacaccgtgt tggaggtoca gggcgccgctg tggatgcaga agatgaagag ggccaaactg tccccacca ggccaggac aaactcagg gcaaggatg gttccaggaa ggcagacacc agcgaggag aggtggggg gcaggggccct ccaggaggcc ccccccagt ggaaaggc MELHNLSSPS PLSLSSVLPP SFSPSPSSAP SAFTTVGGSS GGPCHPTSSS LVSAFLAPIL P ALEFVLGLVG NSLALFICI HTRPWTSNTV FLVSLVAADF LLISNLPRV DYLLHETWR FGAAACKVNL FMLSTNRTAS VFELTAIALN RYLKVVQPHH VLSRASVGAA ARVAGGLWVG ILLNGHLL STFGSPCLS YRVGTPKPSAS LRWHQALYLL EFFLPLAIL FAIVSIGLTI RNRGLGGQAG QRAMRVLAM VVAVYTICFL PSIIFGMSM VAFWLSACRS LDLCQLFHG SLAFTYLNVS LDPVLYCFSS PNLFHQSRAL LGLTRGRQP VSESSYQPS RQWRYREASR KAEIGLKV QGEVSLEKEG SSQK ggttatggtt taaticagca gaattigtg acaactacg acalgtggg gatcatggca tggaaatgcaa cttgcaaaaa ctggctggca gcagaggctg ccciggaaaa giactaccti tccattttt atgggattga gttcgttg gtagtcttg gaaataccat tgtgtttac ggtacatct tctcttgaa gaactggaa acgactgaa ttacttct taacctct gctctgact tagctttct gtcacctc ccatgtga taaggatga tggcaatgga aactggat aactggat ttacttct taacctct gctctgact tagctttct atgtgttca tggcaactc talaccaga tcttctct cactttac agcatagat atggagact gctctgata agcaacgat aacacctct gcaaaagaa gagttgcta ttatactc ctggccat tgggtttg taacttga gttactaccc atactccoc ttaaaatcc tgtataact gacaatggca ccactgaa tgaattgca agtctggag acccaacta caactcatt lacagatg gttaact gttgggtc ctatctc ttttgat ttttgat gttgttct ttttcaaga tctctct cctaaagcag aggaataggc aggtgtctac tgcctggcc ctgaaagc ctcaacti ggtcactg gcagtggttaa tctctct gcttttaca cctatcacg tcatgggaa tgtgaggatc gctcacgc tggggagt ggaagatg cagtgcat cagtgcat aggtcgtc caactcctt tacatgiga cagggctt ggccttctg aacagiga tcaacctgt cttattt ctttggag atcactcag ggacatgctg atgaataac tgaacacaa ctcaaatc ctacatct ttacagat ggctcagaa cttactt cattcagaga aaagtggagg gcttgtaa cagattgtc tacatgaa tctgaa gcc agttacat tgccttact catagacatc aatcagagag tgcacagat ttaacttga tctaaagaca agttgtacc agatgtg aagatgtg aaaaagatgg gacgacaga atgtactgt tcttctct aagaatgaa aggagtga cttgctatg tttggcatg taactcaaa atactagga gtaaggct tctcaatca gtgcaaaaat ggaagataa taagcaaca agttgtcgt attgtacac tggtagat gtaaaaaa aaaaaaaa MAWNATCKNW LAEEAALEKY YLSIFYGIEF VVGVLGNTIV VYGYFSLKN P WNSSNYLNF LSVSDLAFLC TLPMLIRSYA NGNWYGDVL CTSNRYVLHA NLYTSILFT FISIDRYLI KYPFREHLLQ KKEFALISL AIWVLVLEL LPILPLINPV ITDNGTTCND FASSGDPNLYN LIYSMCLTLL GFLPLFVMC FFYKIALFL KQRNRQVATA LPLEKPLNV IMAVVIFSVL FPHYHVMRNV RIASRLGWSK QYQCTQVNV SFYIVTRPLA FLNSVINPVF YLLGDHFRD MLMNQLRHNF KSLTSFSRWA HELLSFREK tggagcatg ctccctgggc tcttcgggc ggcggccgc gctgccttc gcttgaggca aaaggactct tgtggaagat ggaaactcatt gtccatttc cagaatgat ttcaagccc atcaatggga ccgatactg ctgtctgtg ttgaaatgt tgaagaactc ctgcatctct gcttgcattc tccatctac tgaataccatg gcttctcgg cagttgtgac tgcgttccat accgggacat ccaacacaac	Homo sapiens
566	189904	Purinergic Receptor P2U2 (GPR91)	NM_033050	ggttatggtt taaticagca gaattigtg acaactacg acalgtggg gatcatggca tggaaatgcaa cttgcaaaaa ctggctggca gcagaggctg ccciggaaaa giactaccti tccattttt atgggattga gttcgttg gtagtcttg gaaataccat tgtgtttac ggtacatct tctcttgaa gaactggaa acgactgaa ttacttct taacctct gctctgact tagctttct gtcacctc ccatgtga taaggatga tggcaatgga aactggat aactggat ttacttct taacctct gctctgact tagctttct atgtgttca tggcaactc talaccaga tcttctct cactttac agcatagat atggagact gctctgata agcaacgat aacacctct gcaaaagaa gagttgcta ttatactc ctggccat tgggtttg taacttga gttactaccc atactccoc ttaaaatcc tgtataact gacaatggca ccactgaa tgaattgca agtctggag acccaacta caactcatt lacagatg gttaact gttgggtc ctatctc ttttgat ttttgat gttgttct ttttcaaga tctctct cctaaagcag aggaataggc aggtgtctac tgcctggcc ctgaaagc ctcaacti ggtcactg gcagtggttaa tctctct gcttttaca cctatcacg tcatgggaa tgtgaggatc gctcacgc tggggagt ggaagatg cagtgcat cagtgcat aggtcgtc caactcctt tacatgiga cagggctt ggccttctg aacagiga tcaacctgt cttattt ctttggag atcactcag ggacatgctg atgaataac tgaacacaa ctcaaatc ctacatct ttacagat ggctcagaa cttactt cattcagaga aaagtggagg gcttgtaa cagattgtc tacatgaa tctgaa gcc agttacat tgccttact catagacatc aatcagagag tgcacagat ttaacttga tctaaagaca agttgtacc agatgtg aagatgtg aaaaagatgg gacgacaga atgtactgt tcttctct aagaatgaa aggagtga cttgctatg tttggcatg taactcaaa atactagga gtaaggct tctcaatca gtgcaaaaat ggaagataa taagcaaca agttgtcgt attgtacac tggtagat gtaaaaaa aaaaaaaa MAWNATCKNW LAEEAALEKY YLSIFYGIEF VVGVLGNTIV VYGYFSLKN P WNSSNYLNF LSVSDLAFLC TLPMLIRSYA NGNWYGDVL CTSNRYVLHA NLYTSILFT FISIDRYLI KYPFREHLLQ KKEFALISL AIWVLVLEL LPILPLINPV ITDNGTTCND FASSGDPNLYN LIYSMCLTLL GFLPLFVMC FFYKIALFL KQRNRQVATA LPLEKPLNV IMAVVIFSVL FPHYHVMRNV RIASRLGWSK QYQCTQVNV SFYIVTRPLA FLNSVINPVF YLLGDHFRD MLMNQLRHNF KSLTSFSRWA HELLSFREK tggagcatg ctccctgggc tcttcgggc ggcggccgc gctgccttc gcttgaggca aaaggactct tgtggaagat ggaaactcatt gtccatttc cagaatgat ttcaagccc atcaatggga ccgatactg ctgtctgtg ttgaaatgt tgaagaactc ctgcatctct gcttgcattc tccatctac tgaataccatg gcttctcgg cagttgtgac tgcgttccat accgggacat ccaacacaac	Homo sapiens
567	189904	Purinergic Receptor P2U2 (GPR91)	NP_149039.1	ggttatggtt taaticagca gaattigtg acaactacg acalgtggg gatcatggca tggaaatgcaa cttgcaaaaa ctggctggca gcagaggctg ccciggaaaa giactaccti tccattttt atgggattga gttcgttg gtagtcttg gaaataccat tgtgtttac ggtacatct tctcttgaa gaactggaa acgactgaa ttacttct taacctct gctctgact tagctttct gtcacctc ccatgtga taaggatga tggcaatgga aactggat aactggat ttacttct taacctct gctctgact tagctttct atgtgttca tggcaactc talaccaga tcttctct cactttac agcatagat atggagact gctctgata agcaacgat aacacctct gcaaaagaa gagttgcta ttatactc ctggccat tgggtttg taacttga gttactaccc atactccoc ttaaaatcc tgtataact gacaatggca ccactgaa tgaattgca agtctggag acccaacta caactcatt lacagatg gttaact gttgggtc ctatctc ttttgat ttttgat gttgttct ttttcaaga tctctct cctaaagcag aggaataggc aggtgtctac tgcctggcc ctgaaagc ctcaacti ggtcactg gcagtggttaa tctctct gcttttaca cctatcacg tcatgggaa tgtgaggatc gctcacgc tggggagt ggaagatg cagtgcat cagtgcat aggtcgtc caactcctt tacatgiga cagggctt ggccttctg aacagiga tcaacctgt cttattt ctttggag atcactcag ggacatgctg atgaataac tgaacacaa ctcaaatc ctacatct ttacagat ggctcagaa cttactt cattcagaga aaagtggagg gcttgtaa cagattgtc tacatgaa tctgaa gcc agttacat tgccttact catagacatc aatcagagag tgcacagat ttaacttga tctaaagaca agttgtacc agatgtg aagatgtg aaaaagatgg gacgacaga atgtactgt tcttctct aagaatgaa aggagtga cttgctatg tttggcatg taactcaaa atactagga gtaaggct tctcaatca gtgcaaaaat ggaagataa taagcaaca agttgtcgt attgtacac tggtagat gtaaaaaa aaaaaaaa MAWNATCKNW LAEEAALEKY YLSIFYGIEF VVGVLGNTIV VYGYFSLKN P WNSSNYLNF LSVSDLAFLC TLPMLIRSYA NGNWYGDVL CTSNRYVLHA NLYTSILFT FISIDRYLI KYPFREHLLQ KKEFALISL AIWVLVLEL LPILPLINPV ITDNGTTCND FASSGDPNLYN LIYSMCLTLL GFLPLFVMC FFYKIALFL KQRNRQVATA LPLEKPLNV IMAVVIFSVL FPHYHVMRNV RIASRLGWSK QYQCTQVNV SFYIVTRPLA FLNSVINPVF YLLGDHFRD MLMNQLRHNF KSLTSFSRWA HELLSFREK tggagcatg ctccctgggc tcttcgggc ggcggccgc gctgccttc gcttgaggca aaaggactct tgtggaagat ggaaactcatt gtccatttc cagaatgat ttcaagccc atcaatggga ccgatactg ctgtctgtg ttgaaatgt tgaagaactc ctgcatctct gcttgcattc tccatctac tgaataccatg gcttctcgg cagttgtgac tgcgttccat accgggacat ccaacacaac	Homo sapiens
568	189920	G Protein- Coupled Receptor GPR63 (PSP24)	NM_030784	ggttatggtt taaticagca gaattigtg acaactacg acalgtggg gatcatggca tggaaatgcaa cttgcaaaaa ctggctggca gcagaggctg ccciggaaaa giactaccti tccattttt atgggattga gttcgttg gtagtcttg gaaataccat tgtgtttac ggtacatct tctcttgaa gaactggaa acgactgaa ttacttct taacctct gctctgact tagctttct gtcacctc ccatgtga taaggatga tggcaatgga aactggat aactggat ttacttct taacctct gctctgact tagctttct atgtgttca tggcaactc talaccaga tcttctct cactttac agcatagat atggagact gctctgata agcaacgat aacacctct gcaaaagaa gagttgcta ttatactc ctggccat tgggtttg taacttga gttactaccc atactccoc ttaaaatcc tgtataact gacaatggca ccactgaa tgaattgca agtctggag acccaacta caactcatt lacagatg gttaact gttgggtc ctatctc ttttgat ttttgat gttgttct ttttcaaga tctctct cctaaagcag aggaataggc aggtgtctac tgcctggcc ctgaaagc ctcaacti ggtcactg gcagtggttaa tctctct gcttttaca cctatcacg tcatgggaa tgtgaggatc gctcacgc tggggagt ggaagatg cagtgcat cagtgcat aggtcgtc caactcctt tacatgiga cagggctt ggccttctg aacagiga tcaacctgt cttattt ctttggag atcactcag ggacatgctg atgaataac tgaacacaa ctcaaatc ctacatct ttacagat ggctcagaa cttactt cattcagaga aaagtggagg gcttgtaa cagattgtc tacatgaa tctgaa gcc agttacat tgccttact catagacatc aatcagagag tgcacagat ttaacttga tctaaagaca agttgtacc agatgtg aagatgtg aaaaagatgg gacgacaga atgtactgt tcttctct aagaatgaa aggagtga cttgctatg tttggcatg taactcaaa atactagga gtaaggct tctcaatca gtgcaaaaat ggaagataa taagcaaca agttgtcgt attgtacac tggtagat gtaaaaaa aaaaaaaa MAWNATCKNW LAEEAALEKY YLSIFYGIEF VVGVLGNTIV VYGYFSLKN P WNSSNYLNF LSVSDLAFLC TLPMLIRSYA NGNWYGDVL CTSNRYVLHA NLYTSILFT FISIDRYLI KYPFREHLLQ KKEFALISL AIWVLVLEL LPILPLINPV ITDNGTTCND FASSGDPNLYN LIYSMCLTLL GFLPLFVMC FFYKIALFL KQRNRQVATA LPLEKPLNV IMAVVIFSVL FPHYHVMRNV RIASRLGWSK QYQCTQVNV SFYIVTRPLA FLNSVINPVF YLLGDHFRD MLMNQLRHNF KSLTSFSRWA HELLSFREK tggagcatg ctccctgggc tcttcgggc ggcggccgc gctgccttc gcttgaggca aaaggactct tgtggaagat ggaaactcatt gtccatttc cagaatgat ttcaagccc atcaatggga ccgatactg ctgtctgtg ttgaaatgt tgaagaactc ctgcatctct gcttgcattc tccatctac tgaataccatg gcttctcgg cagttgtgac tgcgttccat accgggacat ccaacacaac	Homo sapiens

beta)

569	189920	G Protein- Coupled Receptor GPR63 (PSP24 beta)	NP_110411.1	<p>attgtctg tttgaaacaa cctacatgaa tatiacacac cctccacat tccagcatcc tgcctcagt ccatigctta gatatagtt tgaaccatg gctccacatg gttgagtc ctgaccgig aatagtiacag ctgtgcccac aacaccagca gcatthaaga gcataaacti gctcttcag atacccttt ctgtataat gatatiaat ctgtttgtgt gtaacttggt gttgacctca tggthacca aaaaagctgcc atgaggtctg caataacat cctcttcgac agcttcagtt ttgcagacat gttgcttgca gtgctgaaca tgcccttgc cctgttaact attctacta cccgatggat ttgggaaa ttcttgaa tgggtatctg taagtittc tggttattg tgatagaagg agtagccalc ctgtctatca ttgacalaga tgggttctt attatagtc agaggcagga taagctaaac ccatataag ctgaaggtct gatigcagtt tctgggcaa ctctcttg tlgatcttt ccttagccg taggaaaccc cagacctgcag ataccctcc gagctcccca gtgtgtgttt gggtacacaa ccaalcacagg ctaccaggt talgtattt tgaattict cattcttc ttcalacct tcttggaat actgtacta ttatgggca tactcaac ccttcggac aatgccttga ggalccatag ctaccctgaa ggataltgcc tcaagccaggc cagcaaacig ggtctatga gtctgcag agctttocag atgagcattg acatgggtt taaacacagt gctctaccca ctatttgat tctcttgc tcttcatg tctgtcggc cctaccac actacagcc ttgtggcaac attcagtaag cacttttact atcagcacaa ctittttgag attagcact ggctactgig gctctgclac ctcaagctg catgaatcc gctgaltac tactggagga ttgaagaat ccatgagct tgcctggaca tgaatgctaa gctctcaag ttgtgcccgc agctccctgg tcacacaaag cagcggatc gctctagtc tgcctagtg tgggggagc atcggaggtt ggtgtgaata ttggaaactgg ctgacattt ggggtatgct tctcttat tgcattgaa tctcttct catagcctt ccaatttat ttitttata ggggttgggt atgtatgtgt gtgagcagtg taagaagaaga atggtaatta tagtctgt accaagaata aataataggga aagtgtatc aaataaac tccaggttc aatagaatac ctcaatttag ggtgaggaga ctittttg gtttgggggt ttctcttga ttgattttgt ttcatagtg ggaaacaga ttgtctttha ttgagcctgc agttacatg aatttaggt gttctgtg ctgclaaagt atgcttatt gattttata agactttt ttcttgaa gacactgct ctttaacct cacatggag cc MVFSAVLTAF HTGTSNTTFV VYENTYMNIT LPPFQHPDL SPLRYSFET MAPTGLSSLT VNSTAVPTTP AAFKSLNLP QITLSAINTF ILFVSFLGNL VVCLMVYQKA AMRSAINLL ASLAFADMLL AVLNMFPALV TILTRWIFG KFFCRVSAMF FWLFVIEGVA ILLISIDRF LIIVQRQDKL NPYRAKVLIA VSWATSFCA FPLAVGNPDL QIPSRAPQCV FGYYTNPYQ AYVILISLIS FFIPFLVILY SFMGILNTR HNALRIHSYP EGICLSQASK LGLMSLQRPF QMSIDMGFKT RAFTTILF AVFIVCWAPF ITYSLVATFS KHFYQHNF EISTWLLWLC YLKSALNPLI YYWRIKKFHD ACLDMMPKSF KFLPQLPGHT KRRIRPSAVY VCGEHRVTV</p>	P	Homo sapiens
570	189945	G Protein- Coupled Receptor Dj287g14.2	AK027843	<p>ttgtttgagt catctctga agctthaaa acaattgag aattggcctt caagatagac ctaaaagca catcacatg gaattata acteggaact tggctctcag cgtatccct ctgtttaccag ggacaaatgc aattcaaat tttagcatg gcttccaag caataatgaa tctatttcc agatgatt ttgaggtgga caagtggatc cactggcatc tgaatttg cctccaaact tacttgagaa ttiaagtcca gaaatcttg tatttgtag aagaagcacag ttactttt tcaaaaaac tggactttc caggatgtag gaccccaag aaaaacttta gtgagttag tgaaggcgtg cagtattgga aacattacta tccagaatct gaaagatctt gticaataa aatcaaaaa tacaagaact caggaaatgc atcatccat ctgtgcttc tgggacttga acaaaaaaa aagtittgga ggaatggaca cgtcaggatg tlttgacac agagatcag atgcaatgga gacagtctgc ctgtgaacc actcacaca cttggaggt ctgagggacc ttcaagaag tgcctcacag ttatgtgcaa gaaacactaa agtctcact ttcatcagct atattgggtg tggatattct gctattttt cagcagcaac tctcttgaca tatgtgtt ttgagaatt gcaagaggtt tatcccca aaacttcat gaaactgagc acagccctgc tgtcttgaa tctctctc ctcttagatg gctggatcac cttctcaat gttgagac ttgtcattg tttgacagc ctgttcatt tctctctt ggaacattt acctggatgg ggttagaagc aattcacatg tactatgct ttgttaaagt atttaacat tacttcgccc gatacatct aaaaattcgc atcatggct ggggtttggc tgcctagtg gtgtcagtg ttctagcag cagaacaac aatgaagct atggaaaga aagtattggg aagaagaaaaa gtagtaatt ctgtgggt caagatccag tcalattta tgtgacctgt</p>	A	Homo sapiens

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PQRKTLVSYV MACSIGNITI QNLKDPVQIK KHRTTQEVH HPICAFWDLN
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IFYVTCAGYF GVMFFLNIAM FIVVMVQICG RNGKRSNRTL REEVLRLRS
VVSLTFLLGM TWGFAFFAWG PLNIPFMYLF SIFNSLQGLF IFIFHCAMKE
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STYLTSSKSKS SSTTYFKRNS HTDNNVSYEHS FNKSGSLRQC FHGQVLVKTG PC
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Homo sapiens

Homo sapiens

P

A

189945 G Protein-Coupled Receptor DJ287g14.2 BAB55406

190026 G Protein-Coupled Receptor JEG18 NM_032553

571

572

573 190026 G Protein-
Coupled Receptor
JEG18 NP_115942.1 Homo
sapiens

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574 190031 G Protein-
Coupled Receptor
VLGR1 AF055084 Homo
sapiens

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				<p>MQLCIFCCCC ILFYFDLYDF GRGYDFTIQE NGLQIDQPPE IGNISIVRII IMKNDNAEGI IEFDPKYTAF EVEDVGLIM IPVVRHLGTY GYVTADFISQ SSSASPGGVD YILHGSTVTF QHQQNLSFIN ISIDDNSE FEEPIELLT GATGAVLGR HL VSRILIAK SDSPFGVIRF LNQKSIAN PNSTMILSLV LERTGILLGE IQVNWETVGP NSQEALLPON RDIADPVSL FYFGEGERGV RTILTYPH EEIEVEETFI IKLHL VKGEA KLDSRAKDVLT LTQEFGDPN GVVQFAPETL SKKTYSEPLA LEGPLLTFF VRRVKGTFGE IMVYWELSS EFDTEFLST SQFTIADGE SEASFDVHLL PDEVPEIEED YVIQLVSVEG GAELDLKSI TWFSVYANDD PHGVFALYSD RQSLIGQNL IRSIQINTR LAGTFGDVAV GLRISSDHKE QPIVTENAER QL VVKDGATY KVDVVPKNNQ VFLSGSNFT LQLVTVMVLVG GRFYGMPTIL QEAKSAVLV SEKAANSQVG FESTAFQLMN ITAGTSHVMI SRRGTYGALS VAWTTGYAPG LEIPEFIVVG NMPTLGLSL FSHGEQRKGV FLWTFPSGW PEAFVLHLSG VQSSAPGGAQ LRSGFIVAEI EPMGVFQFST SSRNIIVSED TQMRLHVQR LFHSHDLK VSYQTTAGSA KPLEDFEPVQ NGELFFQKQF TEVDTEITII NDQLSEIEEF FYNLTSVEI RGLQKFDVNW SPRLNLDPSV AVITILDNDL LAGMDISFPE TTVA VAVD TT LPVETEST YLSTSKTTTI LQPTNVVAIV TEATGVSAIP EKL VILHGT AVSEKPDVAT VTANVSIHT FSLGPSIVYI EEMKNGTFN TAEVLRRTG GFTGNVSITV KTFGERCAQM EPNALPFRGI YGISNLTWAV EEDFEEQTL TLFLDGERE RKVSVQLDD DEPEGQEFFY VFLTNPQGA QIVEGKDDTG FAAFAMVIT GSDLHNGIG FSEESQSGLE LREGAVMRRL HLIVTRQPNR AFEDVKVFWR VTLNKTVVVL QKDGVLNLMEE LQSVSGTTTC TMGQTKCFIS IELKPEKVPQ VEVYFFVELY EATAGAAINN SARFAQIKL ESDSQSLVY FSVGSRLAVA HKKATLISLQ VARDSGTGLM MSVNFSTQEL RSAETIGRTI ISPAISGKDF VITEGTLVFE PGQRSTVLDV ILTPETGSLN SFPKRFQIVL FDPKGGARD KVVGTANITL VSDADSQAIW GLADQLHQPV NDDLNRVLH TISMKVATEN TDEQLSAMMH LIEKITTEGK IQAFSVASRT LFYEILCSLI NPKRDKTRGF SHFAEVTEFN AFSLLTNVTC GSPGEKSKTI LDSCPYLSIL ALHWYPQQIN GHKFEKEGD YRIPERLLD VQDAEIMAGK STCKLVQFTE YSSQQWFISG NNLPTLKNKV LSLSVKGGSS QLLTNDNEVL YRIYAAEPRI IPQTSCLLW NQAAASWLSD SQFCKVIEET</p>		

576	190168	G Protein- Coupled Receptor GPR58	NM_014626	ADYVEACSH MSVYAVYART DNLSSYNEAF FTSGFICISG LCLAVLSHIF CARYSMFAAK LLTHMMAASL GTQLFLASA YASPOLAEES CSAMAAVTHY LYLCQFSWML IQSVNFWYVL VMNDEHTERR YLLFLLSWG LPAFVVILLI VLKGIYHQMS MSQYGLIHG DLCFIPNVYA ALFTAALVPL TCLVVFVVF IHAYQVKPQW KAYDDVFRGR TNAAEPLIL YLFALISVTW LWGGLHMA YR HFWMVLVLFVI FNSLQGLYVF MVYFILHNQM CCPMKASYTV EMNGHPGPST AFFTPGSGMP PAGGEISKST QNLIGAMEEV PPDWERASFQ QGSQASPD LK PSPONGATFP SSGYGQGS LIADEESQEF DLI FALKTGA GLSVSDNESG QGSQEGGTLT DSQIVELRRI PIADTHL atgatacat ttatggcagg atccattat atcaaatat ttggcaatc ttgcataatg atttcaatt cctactcaa gcagctcac acaacaaca acttccat cctctccalg gccalcactg atttccctt gggattcac atcaltgcat atagatgat cagatcgig gagaactgct ggattttgg gcttactt ttcaagattt attatgatt ttgactgag cttagcataa catcattt tcatcttgc tcagtggcca ttgalagatt ttatgtata ttgtaccat tactttat caccataata actattccag tcattaaaaag attgctact ctaigtgt cggccctgg agcattgcc ttggggcgg tcttcaga ggcctalgca gatggaatag agggctatga calcttggt gctgtcca gtctgcc agtgatg acaagctat gggggaccac ctgtttatg gcaggttct tcatctcgg gtctatgag ggaggatt acggcaaat ttggcagta tccagaaaac atgcctcag catcaataac ttgcgagaaa atcaataa tcaagtgaag aaagacaaaa aagtgccaa aactttagga atagtatag agttttt attatgtt ttcttgg ttcttcaat ttatggat ccttttga acttctac tctgtatg ttgttgg cctgacatg gtttggcat ttactcca catgaaatc gttaataat ggtttctt atccctgt tgcagagca ctgaatga ttgttgg taaatttt agctcatgt tccataatc tattgtgt atgcaaaaag aaagtga g MYSFMAGSIF ITIFGNLAMI ISISYFKQLH TPTNFLILSM AITDFLLGFT IMPYSMRSV P ENCWYFGLTF CKIYVSF DLM LSITSIFHL C SVAIDRFYAI CYP LLYSTKI TIPVKRLL L LCWSVPGAFA FGAVFSEAYA DGIEGYDIL V ACSSCPVMF NKLWGTTLFM AGFTTPGSMV VGIYKFAV SRKHAHAINN LRENQNNQVK KDKKAAKTLG IVIGVFLLCW FPCFFTILLD PFLNFSTPVV LFDALTWFGY FNSTCNPLIY GFFYPWFRA LKYILLGKIF SSCFHNTILC MQKESE atgatacaa ctalattcc cgaagaccta tccagtgtc caaaattgt aaataagatc ctgtctccc accaacctgt ctttcaigt ccaggatata atgtattcgg ttatgactgg agccatgatt attcattat cggaacttg gtataatgg ttccatac gcattcaaa cagcttact ccccaaaa ctctgac ctctccatgg caaccacgga ctctcgtg gttttgca ttatgccata cagcataaag cgatcaggg agagtgtcgt gtacttggg gatggcttt gtatacca caaagctt gacatgagc tccagctgac ctccatttc cacctctgt ccaattgcat tgaccgatt tatgccgt gtacccctt acataaca accaaaaa cgaactcac cataaagcaa ctgtggcat ttgtcgtg agtctcgt ctttttt ttgtttgt ttatcgtg gccgatgt ccggtalgca gagctataag atactgtg ctgtctcaa ttctgtcc ctacttca acaattcgg ggggacata ttgttacta catgtttt taccctggc tccatcagg ttgtattia ttgcataat ttatggt ttatcgtg ggggacata ttgttacta catgtttt taccctggc gcagtgaaa aacactalc caagaaaaag gacaggaaa cagcgaagac actgtgtata gtaatggggg ttgttctggc ttgtgtgt cctgtttt ttgtgtgt gatgaccca taccatgact atccactcc cataataa ttgatctt tagtgtgct ccggacttc aacttact gcaacctct taticalgc ttittaalc catgtttca gaaagcatt aagttacatag tgcaggaaa aatattgac tccattcag aaactgaaa ttgtttct gaagacatt aa MDLTYPEDL SSCPKFVNKI LSSHQPLFSC PGDNVFGYDW SHDYPLFGNL VIMVSISHFK QLHSPTNFLI LSMATTDFLL GFVIMPYSIM RSVESCWYFG	Homo sapiens
577	190168	G Protein- Coupled Receptor GPR58	NP_055441.1	ADYVEACSH MSVYAVYART DNLSSYNEAF FTSGFICISG LCLAVLSHIF CARYSMFAAK LLTHMMAASL GTQLFLASA YASPOLAEES CSAMAAVTHY LYLCQFSWML IQSVNFWYVL VMNDEHTERR YLLFLLSWG LPAFVVILLI VLKGIYHQMS MSQYGLIHG DLCFIPNVYA ALFTAALVPL TCLVVFVVF IHAYQVKPQW KAYDDVFRGR TNAAEPLIL YLFALISVTW LWGGLHMA YR HFWMVLVLFVI FNSLQGLYVF MVYFILHNQM CCPMKASYTV EMNGHPGPST AFFTPGSGMP PAGGEISKST QNLIGAMEEV PPDWERASFQ QGSQASPD LK PSPONGATFP SSGYGQGS LIADEESQEF DLI FALKTGA GLSVSDNESG QGSQEGGTLT DSQIVELRRI PIADTHL atgatacat ttatggcagg atccattat atcaaatat ttggcaatc ttgcataatg atttcaatt cctactcaa gcagctcac acaacaaca acttccat cctctccalg gccalcactg atttccctt gggattcac atcaltgcat atagatgat cagatcgig gagaactgct ggattttgg gcttactt ttcaagattt attatgatt ttgactgag cttagcataa catcattt tcatcttgc tcagtggcca ttgalagatt ttatgtata ttgtaccat tactttat caccataata actattccag tcattaaaaag attgctact ctaigtgt cggccctgg agcattgcc ttggggcgg tcttcaga ggcctalgca gatggaatag agggctatga calcttggt gctgtcca gtctgcc agtgatg acaagctat gggggaccac ctgtttatg gcaggttct tcatctcgg gtctatgag ggaggatt acggcaaat ttggcagta tccagaaaac atgcctcag catcaataac ttgcgagaaa atcaataa tcaagtgaag aaagacaaaa aagtgccaa aactttagga atagtatag agttttt attatgtt ttcttgg ttcttcaat ttatggat ccttttga acttctac tctgtatg ttgttgg cctgacatg gtttggcat ttactcca catgaaatc gttaataat ggtttctt atccctgt tgcagagca ctgaatga ttgttgg taaatttt agctcatgt tccataatc tattgtgt atgcaaaaag aaagtga g MYSFMAGSIF ITIFGNLAMI ISISYFKQLH TPTNFLILSM AITDFLLGFT IMPYSMRSV P ENCWYFGLTF CKIYVSF DLM LSITSIFHL C SVAIDRFYAI CYP LLYSTKI TIPVKRLL L LCWSVPGAFA FGAVFSEAYA DGIEGYDIL V ACSSCPVMF NKLWGTTLFM AGFTTPGSMV VGIYKFAV SRKHAHAINN LRENQNNQVK KDKKAAKTLG IVIGVFLLCW FPCFFTILLD PFLNFSTPVV LFDALTWFGY FNSTCNPLIY GFFYPWFRA LKYILLGKIF SSCFHNTILC MQKESE atgatacaa ctalattcc cgaagaccta tccagtgtc caaaattgt aaataagatc ctgtctccc accaacctgt ctttcaigt ccaggatata atgtattcgg ttatgactgg agccatgatt attcattat cggaacttg gtataatgg ttccatac gcattcaaa cagcttact ccccaaaa ctctgac ctctccatgg caaccacgga ctctcgtg gttttgca ttatgccata cagcataaag cgatcaggg agagtgtcgt gtacttggg gatggcttt gtatacca caaagctt gacatgagc tccagctgac ctccatttc cacctctgt ccaattgcat tgaccgatt tatgccgt gtacccctt acataaca accaaaaa cgaactcac cataaagcaa ctgtggcat ttgtcgtg agtctcgt ctttttt ttgtttgt ttatcgtg gccgatgt ccggtalgca gagctataag atactgtg ctgtctcaa ttctgtcc ctacttca acaattcgg ggggacata ttgttacta catgtttt taccctggc tccatcagg ttgtattia ttgcataat ttatggt ttatcgtg ggggacata ttgttacta catgtttt taccctggc gcagtgaaa aacactalc caagaaaaag gacaggaaa cagcgaagac actgtgtata gtaatggggg ttgttctggc ttgtgtgt cctgtttt ttgtgtgt gatgaccca taccatgact atccactcc cataataa ttgatctt tagtgtgct ccggacttc aacttact gcaacctct taticalgc ttittaalc catgtttca gaaagcatt aagttacatag tgcaggaaa aatattgac tccattcag aaactgaaa ttgtttct gaagacatt aa MDLTYPEDL SSCPKFVNKI LSSHQPLFSC PGDNVFGYDW SHDYPLFGNL VIMVSISHFK QLHSPTNFLI LSMATTDFLL GFVIMPYSIM RSVESCWYFG	Homo sapiens
578	190170	G Protein- Coupled Receptor GPR57	NM_014627	ADYVEACSH MSVYAVYART DNLSSYNEAF FTSGFICISG LCLAVLSHIF CARYSMFAAK LLTHMMAASL GTQLFLASA YASPOLAEES CSAMAAVTHY LYLCQFSWML IQSVNFWYVL VMNDEHTERR YLLFLLSWG LPAFVVILLI VLKGIYHQMS MSQYGLIHG DLCFIPNVYA ALFTAALVPL TCLVVFVVF IHAYQVKPQW KAYDDVFRGR TNAAEPLIL YLFALISVTW LWGGLHMA YR HFWMVLVLFVI FNSLQGLYVF MVYFILHNQM CCPMKASYTV EMNGHPGPST AFFTPGSGMP PAGGEISKST QNLIGAMEEV PPDWERASFQ QGSQASPD LK PSPONGATFP SSGYGQGS LIADEESQEF DLI FALKTGA GLSVSDNESG QGSQEGGTLT DSQIVELRRI PIADTHL atgatacat ttatggcagg atccattat atcaaatat ttggcaatc ttgcataatg atttcaatt cctactcaa gcagctcac acaacaaca acttccat cctctccalg gccalcactg atttccctt gggattcac atcaltgcat atagatgat cagatcgig gagaactgct ggattttgg gcttactt ttcaagattt attatgatt ttgactgag cttagcataa catcattt tcatcttgc tcagtggcca ttgalagatt ttatgtata ttgtaccat tactttat caccataata actattccag tcattaaaaag attgctact ctaigtgt cggccctgg agcattgcc ttggggcgg tcttcaga ggcctalgca gatggaatag agggctatga calcttggt gctgtcca gtctgcc agtgatg acaagctat gggggaccac ctgtttatg gcaggttct tcatctcgg gtctatgag ggaggatt acggcaaat ttggcagta tccagaaaac atgcctcag catcaataac ttgcgagaaa atcaataa tcaagtgaag aaagacaaaa aagtgccaa aactttagga atagtatag agttttt attatgtt ttcttgg ttcttcaat ttatggat ccttttga acttctac tctgtatg ttgttgg cctgacatg gtttggcat ttactcca catgaaatc gttaataat ggtttctt atccctgt tgcagagca ctgaatga ttgttgg taaatttt agctcatgt tccataatc tattgtgt atgcaaaaag aaagtga g MYSFMAGSIF ITIFGNLAMI ISISYFKQLH TPTNFLILSM AITDFLLGFT IMPYSMRSV P ENCWYFGLTF CKIYVSF DLM LSITSIFHL C SVAIDRFYAI CYP LLYSTKI TIPVKRLL L LCWSVPGAFA FGAVFSEAYA DGIEGYDIL V ACSSCPVMF NKLWGTTLFM AGFTTPGSMV VGIYKFAV SRKHAHAINN LRENQNNQVK KDKKAAKTLG IVIGVFLLCW FPCFFTILLD PFLNFSTPVV LFDALTWFGY FNSTCNPLIY GFFYPWFRA LKYILLGKIF SSCFHNTILC MQKESE atgatacaa ctalattcc cgaagaccta tccagtgtc caaaattgt aaataagatc ctgtctccc accaacctgt ctttcaigt ccaggatata atgtattcgg ttatgactgg agccatgatt attcattat cggaacttg gtataatgg ttccatac gcattcaaa cagcttact ccccaaaa ctctgac ctctccatgg caaccacgga ctctcgtg gttttgca ttatgccata cagcataaag cgatcaggg agagtgtcgt gtacttggg gatggcttt gtatacca caaagctt gacatgagc tccagctgac ctccatttc cacctctgt ccaattgcat tgaccgatt tatgccgt gtacccctt acataaca accaaaaa cgaactcac cataaagcaa ctgtggcat ttgtcgtg agtctcgt ctttttt ttgtttgt ttatcgtg gccgatgt ccggtalgca gagctataag atactgtg ctgtctcaa ttctgtcc ctacttca acaattcgg ggggacata ttgttacta catgtttt taccctggc tccatcagg ttgtattia ttgcataat ttatggt ttatcgtg ggggacata ttgttacta catgtttt taccctggc gcagtgaaa aacactalc caagaaaaag gacaggaaa cagcgaagac actgtgtata gtaatggggg ttgttctggc ttgtgtgt cctgtttt ttgtgtgt gatgaccca taccatgact atccactcc cataataa ttgatctt tagtgtgct ccggacttc aacttact gcaacctct taticalgc ttittaalc catgtttca gaaagcatt aagttacatag tgcaggaaa aatattgac tccattcag aaactgaaa ttgtttct gaagacatt aa MDLTYPEDL SSCPKFVNKI LSSHQPLFSC PGDNVFGYDW SHDYPLFGNL VIMVSISHFK QLHSPTNFLI LSMATTDFLL GFVIMPYSIM RSVESCWYFG	Homo sapiens
579	190170	G Protein- Coupled Receptor	NP_055442.1	ADYVEACSH MSVYAVYART DNLSSYNEAF FTSGFICISG LCLAVLSHIF CARYSMFAAK LLTHMMAASL GTQLFLASA YASPOLAEES CSAMAAVTHY LYLCQFSWML IQSVNFWYVL VMNDEHTERR YLLFLLSWG LPAFVVILLI VLKGIYHQMS MSQYGLIHG DLCFIPNVYA ALFTAALVPL TCLVVFVVF IHAYQVKPQW KAYDDVFRGR TNAAEPLIL YLFALISVTW LWGGLHMA YR HFWMVLVLFVI FNSLQGLYVF MVYFILHNQM CCPMKASYTV EMNGHPGPST AFFTPGSGMP PAGGEISKST QNLIGAMEEV PPDWERASFQ QGSQASPD LK PSPONGATFP SSGYGQGS LIADEESQEF DLI FALKTGA GLSVSDNESG QGSQEGGTLT DSQIVELRRI PIADTHL atgatacat ttatggcagg atccattat atcaaatat ttggcaatc ttgcataatg atttcaatt cctactcaa gcagctcac acaacaaca acttccat cctctccalg gccalcactg atttccctt gggattcac atcaltgcat atagatgat cagatcgig gagaactgct ggattttgg gcttactt ttcaagattt attatgatt ttgactgag cttagcataa catcattt tcatcttgc tcagtggcca ttgalagatt ttatgtata ttgtaccat tactttat caccataata actattccag tcattaaaaag attgctact ctaigtgt cggccctgg agcattgcc ttggggcgg tcttcaga ggcctalgca gatggaatag agggctatga calcttggt gctgtcca gtctgcc agtgatg acaagctat gggggaccac ctgtttatg gcaggttct tcatctcgg gtctatgag ggaggatt acggcaaat ttggcagta tccagaaaac atgcctcag catcaataac ttgcgagaaa atcaataa tcaagtgaag aaagacaaaa aagtgccaa aactttagga atagtatag agttttt attatgtt ttcttgg ttcttcaat ttatggat ccttttga acttctac tctgtatg ttgttgg cctgacatg gtttggcat ttactcca catgaaatc gttaataat ggtttctt atccctgt tgcagagca ctgaatga ttgttgg taaatttt agctcatgt tccataatc tattgtgt atgcaaaaag aaagtga g MYSFMAGSIF ITIFGNLAMI ISISYFKQLH TPTNFLILSM AITDFLLGFT IMPYSMRSV P ENCWYFGLTF CKIYVSF DLM LSITSIFHL C SVAIDRFYAI CYP LLYSTKI TIPVKRLL L LCWSVPGAFA FGAVFSEAYA DGIEGYDIL V ACSSCPVMF NKLWGTTLFM AGFTTPGSMV VGIYKFAV SRKHAHAINN LRENQNNQVK KDKKAAKTLG IVIGVFLLCW FPCFFTILLD PFLNFSTPVV LFDALTWFGY FNSTCNPLIY GFFYPWFRA LKYILLGKIF SSCFHNTILC MQKESE atgatacaa ctalattcc cgaagaccta tccagtgtc caaaattgt aaataagatc ctgtctccc accaacctgt ctttcaigt ccaggatata atgtattcgg ttatgactgg agccatgatt attcattat cggaacttg gtataatgg ttccatac gcattcaaa cagcttact ccccaaaa ctctgac ctctccatgg caaccacgga ctctcgtg gttttgca ttatgccata cagcataaag cgatcaggg agagtgtcgt gtacttggg gatggcttt gtatacca caaagctt gacatgagc tccagctgac ctccatttc cacctctgt ccaattgcat tgaccgatt tatgccgt gtacccctt acataaca accaaaaa cgaactcac cataaagcaa ctgtggcat ttgtcgtg agtctcgt ctttttt ttgtttgt ttatcgtg gccgatgt ccggtalgca gagctataag atactgtg ctgtctcaa ttctgtcc ctacttca acaattcgg ggggacata ttgttacta catgtttt taccctggc tccatcagg ttgtattia ttgcataat ttatggt ttatcgtg ggggacata ttgttacta catgtttt taccctggc gcagtgaaa aacactalc caagaaaaag gacaggaaa cagcgaagac actgtgtata gtaatggggg ttgttctggc ttgtgtgt cctgtttt ttgtgtgt gatgaccca taccatgact atccactcc cataataa ttgatctt tagtgtgct ccggacttc aacttact gcaacctct taticalgc ttittaalc catgtttca gaaagcatt aagttacatag tgcaggaaa aatattgac tccattcag aaactgaaa ttgtttct gaagacatt aa MDLTYPEDL SSCPKFVNKI LSSHQPLFSC PGDNVFGYDW SHDYPLFGNL VIMVSISHFK QLHSPTNFLI LSMATTDFLL GFVIMPYSIM RSVESCWYFG	Homo sapiens

GPR57

580

190188

G Protein-
Coupled Receptor
LGR6

AB049405

A Homo
sapiens

DGFCFKFHTSF DMMRLRLTSIF HLCSTIAIDRF YAVCYPLHYT TKMTNSTIKQ
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Homo
sapiens

P

ttcccttcc tctctcccc tgggtgaatg atggctgctt ctataacaaa tacaacaaa actcagcagt gtgatctata gcagatggc
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LHLDDEESSK RPLGLLARQA ENHYDQDLDE LQLEMEDSKP HPSVQCSPTP
GPFKPEYLF ESWGIRLAV AIVLLSVLCN GLVLLTVFAG GPVPLPVKF
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LSGGGFQPS GLALLHTY

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A

atgaagtcca ctgacacaa cagcacg-cg gagagtaaca gcagccacac gtgcatgccc ctctccaaa tgcacacag
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190188 G Protein-
Coupled Receptor
LGR6 AAG17168.1

581

190414 G Protein-coupled
Receptor GPR101 AF411115

582

583	190414	G Protein-coupled Receptor GPR101	CAC33098.1	<p>MTSTCTNSTR ESNSSHTCMP LSKMPISLAH GIIRSTVLVI FLAASFVGNL VLALVLQRKP P QLLQVTRNRFI FNLLVTDLLQ ISL VAPWVVA TSVPLFWPLN SHFCTALVSL THLFAFASVN TIVLVSDRY LSIHPLSY SKMTQRRGYL LLYGTWIVAI LQSTPPLYGW QQAADFERNALCSMIWVGF SYTILSVVSF IVIPLIVMIA CYSVVFCAAR QHALLYNVK RLSLEVRVKD CVNEDEDEGA EKKEEFODES EFRRQHEGEV KAKEGRMEAK DGLSKAKEGS TENSESVEA RGSEEVRESS TVASDGSMEG KEGSTKVEEN SMKADKGRTE VNQCSIDLGE DGMFEGEDDI NFSEDDVEAV NIPESLPPSR RNSNSNPPLP RCYQCKAAKV IFIIFSYVL SLGPYCFLAV LAVWVDVETQ VPQWVTIII WLFFLQCCIH PYVYGYMHKT IKKEIQDMLK KFFCKEPPK EDSPDLPGT EGGTEGKIVP SYDSATFP</p>	Homo sapiens
584	190418	Inflammation-Related G Protein-Coupled Receptor EX33	NM_020370	<p>taactgtcca ccagaaagga cigtcttgg ggtgagttga acttctcca ttatagaag aatigaaggc tpaagaactc agcctctatc A atgttgaaac gctctgacgc caacttccc tgcctaccatg agtctgtgt gggctatcgt tatgttcag ttatgtgggg ggtgtgtgtg gctgtgacag gcaactgtgg caatgtctc accctactgg ccttggccat ccagcccaag ctccgtaccc gattcaact gctatagcc aactcacac tggctgalt cctctactgc acgtctctc agcctctc tgggtgacac tacctccacc tgcactggcg caccgtggcc acccttgcga gggatltgg gctctcct ttgcttcca attctgtct catctgacc ctctgcctca tgcactggcg accgtactc ctatctgccc accctaaagt ttctcccaa gttttcagtg ccaaggggat agtctgtggca ctgtgtgagca cctgtgtgtgt gggcgtggcc agcttggct cctctgacc tatttatac cttgttaccgt tagtctgcac ctgcagcttt gaccgtacc gaggccggcc ttaccacc atctctatgg gcatctact tgtctgtgg ctgacagga agcatccact ccaaccatgt atccaccgc aggtcaaacg agcagcacag gcactggacc aatacaagt ggcagagga agtagatc agtaggacc agtagggga ggccaggact gatgaggcca tgcctgtgtg ttccaggag ctggacagca ggttagatc agtaggacc agtagggga tttctctga gccagtcagt gctgtccaca ccagacctt ggaaggggac tcaicagaa agccagcca attaaaggag ccagaagagc aagaagacta agcagatggc agagaaagc cctccagaa cctctgcca cctgtccaa agccagcca attaaaggag ccagaagagc tccggaltct tcaicggaat tigggaagt gactogaatg tgtttgtgt tgttctctg ctttgcctg agctacatcc cttctgtct gctcaacat ctggatgcca gattccaggc tcccggggtg gttccatgc tigtgtccaa cctcactgg ctcaatgtgt gcatcaacc tgtctctat gcagccaatg accgcaat cgcgaagca tatgttcca tttaaagag agggcccccgg agttccata ggtccatta gaactgtgac cctagtcacc agaattcagg actgtctct ccaggaccac agtggccagg taataggaga ataggtagaa taacacatgt gggcatttcc acaaatct cttccagcc tcccaatca agtcttcca tcaatgac aatgtttcag ccttagactg cccaaggagt attataat attataat gaattctgtg cttttaaaaa aaaaaaata aaaaaagaa aaaaaaaa aaaaaaaaaa aaaaa</p>	Homo sapiens
585	190418	Inflammation-Related G Protein-Coupled Receptor EX33	NP_065103.1	<p>MWNSSDANFS CYHESVLGYR YVAVSWGTVV AVTGTGTVGNL TLLALAIQPK P LRTFNLLIA NLTLADLLYC TLLQPFSSVDY YLHLHWRTGA TFCRVFGLL FASNSVSILT LCLIALGRYL LIAHPKLFQ VFSAGKIVLA LVSTWVVGVA SFAPLWPIYI LVPVCTCSF DRURGRPYT ILMGIYFVLG LSSVGIFYCL IHRQVKRAAQ ALDQYKLRQA SIHSHVART DEAMPGRFQE LDSRLASGGP SEGISEPVS AATTQTLGD SSEVGDQINS KRAQMAEKS PPEASAKAQ IKGARRAPDS SSEFGKVTRM CFAVFLCFAL SYPFLLLNI LDARVOAPRV VHMLAANLTW LNGCINPVLY AAMNRQFRQA YGSILKRGPR SFHRLH ctttgtcca gagctaaacc agttttctt cttccacag caaatatct gacagatc atctctccc agctgtgtggc aagaagacag aagctctct acaactatct ctggcactc gctgtggcg acatctgtt cctttttc atagtgtt ggtacttct gttggaagat ttcatctga acatgcagat gctcaggct cccgacaga tcatagaat gcttggaatt tcatcatcc acacttcat atggattact</p>	Homo sapiens
586	190419	G Protein-Coupled Receptor Ls190419	AJ303165		Homo sapiens

587	190419	G Protein-Coupled Receptor Ls190419	CAC33085.1	LCFRKPVFL LSTANILTVI ILSQLVARRQ KSSYNYLLAL AADILVLFF IVFVDFLLED FILNMQMPQV PDKIEVLEF SSIHTSIWIT VPLTIDRYIA VCHPLKYHTV SYPARTRKVI VSVYITCFLT SIPYYWPNPNI WTEDYISTSV HHVLIWHCF TVYLVPCSIF FILNSIIVYK LRRKSNFRLR GYSTGKTTAI LFTITSIFAT L WAPRIMIL YHLYGAPIQN RVLVHIMSDI ANMLALLNTA INFFLYCFIS KRFR	P	Homo sapiens
588	190427	Cysteinyl Leukotriene CYSLT2 Receptor	NM_020377	aaagticta agttgaagc gtacagcttca accaaacaa ttaatggctia tctacalc aaaaatcagg aaattaaat ttattgaa algtaaigca gcatgtagia aagacthaac cagtgtttia aaactcaact ttcaaaagaaa agatagiat gtccctgti tcaataaac ciagaagat gtaacagta agcaagaagg aaaaaggga aacacaaag taacttting tgcctgtic tttaaccc agcatggaga gaaaattiat gtccctgcaa ccatccatc cagtacaga aalggaacca aatggcacct tcaagcaata caacagcagg aactgcacaa ttgaaaact caagagagaa ttitccaa ttgataict gataatatt ttctggggag tctgggaaa tgggtgtcc alataitgt tctgtcagcc ttalaagaag tccatctgc tgaacgtit catgctaat ctggccatt cagatctct gtcaatgac acgtctcc tcaaggctga ctatatt agagctcca attggaatt tggagactgc gcttgcaagg taatgctia ttctgtat gtcaacatgt acagcagiat ttattctg accgtgtga gtgtgtgag ttcttgcca atggttacc ctttggct tctgcatgc accagca tgaagtgctg gactctgt gggaacat ggaactat catggctcc tcaataagc tctggagac tggctctgag cagaacggca gtgtcacalc atgttagag ctgaatct ataaatgc taagctgcag accatgaat atattgctt gggtgtggc tgcctgtgc catcttcc actcagcalt tgtatctgc tgaatctg ggttctgta aaagtggagg tccagaaic gggtgtggc gttctaca ggaaggcat gaccacalc atcalcact tgaatctt ctctgtgt ttctgtcc atcacact gaggaocgic cacttgacga calggaaagt gggtttatgc aaagacagac tgcataaagc ttgggtatc acatggcct tggcagcagc caatgctgc tcaatctc tgcctatla cttgtctgg gagaattta aggcagact aaagtctgca ctagaaag ggcatccaca gaaggcaag acaaggtgt ttctctgt tagtgtgtgg ttgaagaaagg aaacagagt ataaggagct cttagatgag accgttct gtaactgtgt gtccatctc attcactat agtctcaaa tgaattgta ttacalcac tcccaacaa tgttattct taatattag ttaccatla cttgtttaa taagacctac ttcaaaati ttattcaggt tatttcagt tgttgagct taatgaggga tacaaggga aaaaatccia cttagtctt gtggctgtaa atalcagact gggaataat gcaagcaca ttggatctia ctttctca gatatgaac cagatctgc gccaatcagg cttctaaat tctcaaaag agccaact tcccaagct ctccagctc ctgtctct tcaatccct gagaatagc aactaacgac gctactggaa gccccagagc agaaaagaa cacatctaa gattcaggga aagactaact gtgaagga aggtctgtct atacaagc agcatcaagt ccaagtgaag gacagtgaga gaaaaggagg agaaagattg gaggcaaga gactctgcaa taagtggagg aaaggagaat ttatttgc attggagag aggttctaac acactgaag caacctatt tctctgtc aggtgtattag gaaggacagc aaaagttagga gaggatctgc gggcatggc ctaggaaatg aaagtattgt gtagaatg gaagggggat caaaggac atgatactca aatttctt gaggatcagg ttatgtacc ttgtcaggt tctctccc ataatctat tgggatggaa gccaataa aaaagggtgc ccttgaggat taggtttag cactcaagg agaatggag tagagggcaa atagcaaaag ttgttcact cctgaatc tattaacatt tccgcagaa agatgtaggg agatgtgc ttcccttgg agatagtgta gaaaacact agatagtg agaggttct tctgtccat tgaacaaagg ctgaaggatc taccaciac tatccatc accatgtac tgaacaaat tgaatgcat	A	Homo sapiens

589	190427	Cysteinyl Leukotriene CYSLT2 Receptor	NP_065110.1	<p>ctccctgcag ggagattat gacaggcaat ttacatttgt tgatccattt accaaagcic tgagttccat ttacagctg aagaaatga agcttagaga aatlaagaag ctgtttaag ttacacagc tagtaagagt ttataaalc tctgtgcaga agtgtggct gggtgtctc cccaccacta cctgtgaag cttccaggaa gattgttga aagctgaat aagagctgtc ctctctacc aattctcc ccctctcac tctcacaaga aaacaaaaa ttctctca gattgtga ccataglac agtaaaaggt ggaggtgata tggcatctg aaagttagga gggactaagt cagctcat actaaac MERKFMSLQP SISVSEMEPN GTSNNNSRN CTIENFKREF FPIVYLIF WGVLGNGLSI P YVFLQPYKKS TSVNVFMLNL AISDLLFIST LPRADYYLR GSNWIFGDLA CRIMSYSLYV NMYSSYFLT VLSVVRFLAM VHPFRLLHVT SIRS AWILCG IIWILMASS IMLLDSGSEQ NGSVTSCLEL NLYKIAKLQT MNYIALVVC LLPFFTL SIC YLLIRVLLK VEVPESGLRV SHRKALTTII ILIIFL CF LPYHTLR TVH LTTWKVGLCK DRLHKALVIT LALAAANACF NPLLYYFAGE NFKDRLKSAL RKGHPQKAKT KCVFPVS VWL RKETRV A cctgtgtcc acgtgtcaga caaatctaa cttctcaagg actccaaaa ccagagacac caggagcccg aatggggaac gatttgtca gctacgaga tggggattac agcgacctt cggacagccc tgtggactgc ctggatggcg cctgcctggc catgaccgg ctgcggtgg ccccgctccc actgtatgcc gccatcttc tgggtgggggt gccgggcaat gccatgggtg cctgggtggc tgggaagggtg gccgcggga ggggtgggtgc cactgtgtg cttaccctgg cgtggcggga ttgtctgctg tgttgtctc tggccatct ggcatggccc attgcccgtg gaggccactg ccgtatgggt gcatgggggt gtcggggct ggctccatc atctgtctga ccatgtatgc cagctgtctg cttctggcag cttcagctgc cgaacctgc tctctggctc tcgggcttgc ctgggtgtct acgtgtcagc gggcgtgtgc ggtgtcaggtg gccgtggggg cagctgggac actggcctg ctgtcacgg tggcctcgc cactacggc cgggtgcacc agggagacct cccagcccgg ctgcagctgtg tgggtggacta cggcggtccc tccagcaccg aagaatgggt gactgccatc cggtttct tgggtctt gggggccctg gttggcgtgg ccagctgtcca cagtgtctc ctgtgtggg cagcccagc ctgcggggc cttgggcacag ccatgtgtt ggggtttt gtctgtggg caccatacca cctgtctgggg ctgtgtctca ctgtggcggc cccgaactcc gcatctctgg ccaggggcct gggggtgaa cccctatog tgggcttgc cctgtctac agctgtctca atccatgct cttctgtat ttggggggg ctaacctcg ccggctactg cagctgtcct gtcactgggc cttgggggag tccagggcc aggaagaaag tgtggacagc aagaaatcca ccagccatga cttgtctcg gagaaggagg tgaaggctgg agacacatg tgggtgtgta tctttatc tcatctaca agactggctt caggcatagc tggatccagg agctcaatga tgtctcat ttatcttc cttactca cagatatoca tcatgcatc gctatgtca aggcctttt aggcactaga gatatagcag tgaocaaaac agacaaaat cctggc MGNDVSVEY GDYSDLSDRP VDCLDGACLA IDPLRVAPLP LYAAIFLVGV P PGNAMVAWVA GKVARRRVGA TWLLHLA VAD LLCCLSLPIL AVPIARGGHW PYGAVGCRAL PSILLTMYA SVLLLAALSA DLCLALGPA WWSTVQRACG VQVACGAAT LALLTVPSA IYRRLHQEHF PARLQCVVDY GGSSTENAV TAIRFLFGL GPLVAVASCH SALLCWAARR CRPLGTAIVV GFFVCWAPYH LLGLVLTAA PNSALLARAL RAEPLIVGLA LAHSLNPML FLYFGRAQLR RSLPAAACHWA LRESQQDES VDSKKSTSHD LVSEMEV atgtgggccc ctgtgtct gggcctcagc ctgtggctc tctgtacc tgggagggg gcccattgt gctgtcaca gcaactagg atgaaggggg actacgtct gggggggctg tttccctgg gcagggccga ggaagcttggc ctccgagcc ggacacggcc cagcagccct gttgtcacca ggtacagagg tgggacgggc tgggtgggg tcaagggtgac caggtctggg gtgtcttga gctggggccc aggtgtggcat ctgtgggttct gttggggccc aggttctct caaaggcct gctctgggca ctggccatga aaatggccgt ggaaggagatc aacaacagt cagatctgt gcccgggctg cgtctgggct acgacctt tgalactgctc tgggagcctg tggggccat gaagcccagc ccatgttcc tggccaaggc aggcagccgc gacatggccg</p>	Homo sapiens
590	190437	G Protein- Coupled Receptor C5L2	NM_018485	<p>ctgtgtcc acgtgtcaga caaatctaa cttctcaagg actccaaaa ccagagacac caggagcccg aatggggaac gatttgtca gctacgaga tggggattac agcgacctt cggacagccc tgtggactgc ctggatggcg cctgcctggc catgaccgg ctgcggtgg ccccgctccc actgtatgcc gccatcttc tgggtgggggt gccgggcaat gccatgggtg cctgggtggc tgggaagggtg gccgcggga ggggtgggtgc cactgtgtg cttaccctgg cgtggcggga ttgtctgctg tgttgtctc tggccatct ggcatggccc attgcccgtg gaggccactg ccgtatgggt gcatgggggt gtcggggct ggctccatc atctgtctga ccatgtatgc cagctgtctg cttctggcag cttcagctgc cgaacctgc tctctggctc tcgggcttgc ctgggtgtct acgtgtcagc gggcgtgtgc ggtgtcaggtg gccgtggggg cagctgggac actggcctg ctgtcacgg tggcctcgc cactacggc cgggtgcacc agggagacct cccagcccgg ctgcagctgtg tgggtggacta cggcggtccc tccagcaccg aagaatgggt gactgccatc cggtttct tgggtctt gggggccctg gttggcgtgg ccagctgtcca cagtgtctc ctgtgtggg cagcccagc ctgcggggc cttgggcacag ccatgtgtt ggggtttt gtctgtggg caccatacca cctgtctgggg ctgtgtctca ctgtggcggc cccgaactcc gcatctctgg ccaggggcct gggggtgaa cccctatog tgggcttgc cctgtctac agctgtctca atccatgct cttctgtat ttggggggg ctaacctcg ccggctactg cagctgtcct gtcactgggc cttgggggag tccagggcc aggaagaaag tgtggacagc aagaaatcca ccagccatga cttgtctcg gagaaggagg tgaaggctgg agacacatg tgggtgtgta tctttatc tcatctaca agactggctt caggcatagc tggatccagg agctcaatga tgtctcat ttatcttc cttactca cagatatoca tcatgcatc gctatgtca aggcctttt aggcactaga gatatagcag tgaocaaaac agacaaaat cctggc MGNDVSVEY GDYSDLSDRP VDCLDGACLA IDPLRVAPLP LYAAIFLVGV P PGNAMVAWVA GKVARRRVGA TWLLHLA VAD LLCCLSLPIL AVPIARGGHW PYGAVGCRAL PSILLTMYA SVLLLAALSA DLCLALGPA WWSTVQRACG VQVACGAAT LALLTVPSA IYRRLHQEHF PARLQCVVDY GGSSTENAV TAIRFLFGL GPLVAVASCH SALLCWAARR CRPLGTAIVV GFFVCWAPYH LLGLVLTAA PNSALLARAL RAEPLIVGLA LAHSLNPML FLYFGRAQLR RSLPAAACHWA LRESQQDES VDSKKSTSHD LVSEMEV atgtgggccc ctgtgtct gggcctcagc ctgtggctc tctgtacc tgggagggg gcccattgt gctgtcaca gcaactagg atgaaggggg actacgtct gggggggctg tttccctgg gcagggccga ggaagcttggc ctccgagcc ggacacggcc cagcagccct gttgtcacca ggtacagagg tgggacgggc tgggtgggg tcaagggtgac caggtctggg gtgtcttga gctggggccc aggtgtggcat ctgtgggttct gttggggccc aggttctct caaaggcct gctctgggca ctggccatga aaatggccgt ggaaggagatc aacaacagt cagatctgt gcccgggctg cgtctgggct acgacctt tgalactgctc tgggagcctg tggggccat gaagcccagc ccatgttcc tggccaaggc aggcagccgc gacatggccg</p>	Homo sapiens
591	190437	G Protein- Coupled Receptor C5L2	NP_060955.1	<p>ctgtgtcc acgtgtcaga caaatctaa cttctcaagg actccaaaa ccagagacac caggagcccg aatggggaac gatttgtca gctacgaga tggggattac agcgacctt cggacagccc tgtggactgc ctggatggcg cctgcctggc catgaccgg ctgcggtgg ccccgctccc actgtatgcc gccatcttc tgggtgggggt gccgggcaat gccatgggtg cctgggtggc tgggaagggtg gccgcggga ggggtgggtgc cactgtgtg cttaccctgg cgtggcggga ttgtctgctg tgttgtctc tggccatct ggcatggccc attgcccgtg gaggccactg ccgtatgggt gcatgggggt gtcggggct ggctccatc atctgtctga ccatgtatgc cagctgtctg cttctggcag cttcagctgc cgaacctgc tctctggctc tcgggcttgc ctgggtgtct acgtgtcagc gggcgtgtgc ggtgtcaggtg gccgtggggg cagctgggac actggcctg ctgtcacgg tggcctcgc cactacggc cgggtgcacc agggagacct cccagcccgg ctgcagctgtg tgggtggacta cggcggtccc tccagcaccg aagaatgggt gactgccatc cggtttct tgggtctt gggggccctg gttggcgtgg ccagctgtcca cagtgtctc ctgtgtggg cagcccagc ctgcggggc cttgggcacag ccatgtgtt ggggtttt gtctgtggg caccatacca cctgtctgggg ctgtgtctca ctgtggcggc cccgaactcc gcatctctgg ccaggggcct gggggtgaa cccctatog tgggcttgc cctgtctac agctgtctca atccatgct cttctgtat ttggggggg ctaacctcg ccggctactg cagctgtcct gtcactgggc cttgggggag tccagggcc aggaagaaag tgtggacagc aagaaatcca ccagccatga cttgtctcg gagaaggagg tgaaggctgg agacacatg tgggtgtgta tctttatc tcatctaca agactggctt caggcatagc tggatccagg agctcaatga tgtctcat ttatcttc cttactca cagatatoca tcatgcatc gctatgtca aggcctttt aggcactaga gatatagcag tgaocaaaac agacaaaat cctggc MGNDVSVEY GDYSDLSDRP VDCLDGACLA IDPLRVAPLP LYAAIFLVGV P PGNAMVAWVA GKVARRRVGA TWLLHLA VAD LLCCLSLPIL AVPIARGGHW PYGAVGCRAL PSILLTMYA SVLLLAALSA DLCLALGPA WWSTVQRACG VQVACGAAT LALLTVPSA IYRRLHQEHF PARLQCVVDY GGSSTENAV TAIRFLFGL GPLVAVASCH SALLCWAARR CRPLGTAIVV GFFVCWAPYH LLGLVLTAA PNSALLARAL RAEPLIVGLA LAHSLNPML FLYFGRAQLR RSLPAAACHWA LRESQQDES VDSKKSTSHD LVSEMEV atgtgggccc ctgtgtct gggcctcagc ctgtggctc tctgtacc tgggagggg gcccattgt gctgtcaca gcaactagg atgaaggggg actacgtct gggggggctg tttccctgg gcagggccga ggaagcttggc ctccgagcc ggacacggcc cagcagccct gttgtcacca ggtacagagg tgggacgggc tgggtgggg tcaagggtgac caggtctggg gtgtcttga gctggggccc aggtgtggcat ctgtgggttct gttggggccc aggttctct caaaggcct gctctgggca ctggccatga aaatggccgt ggaaggagatc aacaacagt cagatctgt gcccgggctg cgtctgggct acgacctt tgalactgctc tgggagcctg tggggccat gaagcccagc ccatgttcc tggccaaggc aggcagccgc gacatggccg</p>	Homo sapiens
592	190438	G Protein- Coupled Receptor Ls190438	LG94114	<p>ctgtgtcc acgtgtcaga caaatctaa cttctcaagg actccaaaa ccagagacac caggagcccg aatggggaac gatttgtca gctacgaga tggggattac agcgacctt cggacagccc tgtggactgc ctggatggcg cctgcctggc catgaccgg ctgcggtgg ccccgctccc actgtatgcc gccatcttc tgggtgggggt gccgggcaat gccatgggtg cctgggtggc tgggaagggtg gccgcggga ggggtgggtgc cactgtgtg cttaccctgg cgtggcggga ttgtctgctg tgttgtctc tggccatct ggcatggccc attgcccgtg gaggccactg ccgtatgggt gcatgggggt gtcggggct ggctccatc atctgtctga ccatgtatgc cagctgtctg cttctggcag cttcagctgc cgaacctgc tctctggctc tcgggcttgc ctgggtgtct acgtgtcagc gggcgtgtgc ggtgtcaggtg gccgtggggg cagctgggac actggcctg ctgtcacgg tggcctcgc cactacggc cgggtgcacc agggagacct cccagcccgg ctgcagctgtg tgggtggacta cggcggtccc tccagcaccg aagaatgggt gactgccatc cggtttct tgggtctt gggggccctg gttggcgtgg ccagctgtcca cagtgtctc ctgtgtggg cagcccagc ctgcggggc cttgggcacag ccatgtgtt ggggtttt gtctgtggg caccatacca cctgtctgggg ctgtgtctca ctgtggcggc cccgaactcc gcatctctgg ccaggggcct gggggtgaa cccctatog tgggcttgc cctgtctac agctgtctca atccatgct cttctgtat ttggggggg ctaacctcg ccggctactg cagctgtcct gtcactgggc cttgggggag tccagggcc aggaagaaag tgtggacagc aagaaatcca ccagccatga cttgtctcg gagaaggagg tgaaggctgg agacacatg tgggtgtgta tctttatc tcatctaca agactggctt caggcatagc tggatccagg agctcaatga tgtctcat ttatcttc cttactca cagatatoca tcatgcatc gctatgtca aggcctttt aggcactaga gatatagcag tgaocaaaac agacaaaat cctggc MGNDVSVEY GDYSDLSDRP VDCLDGACLA IDPLRVAPLP LYAAIFLVGV P PGNAMVAWVA GKVARRRVGA TWLLHLA VAD LLCCLSLPIL AVPIARGGHW PYGAVGCRAL PSILLTMYA SVLLLAALSA DLCLALGPA WWSTVQRACG VQVACGAAT LALLTVPSA IYRRLHQEHF PARLQCVVDY GGSSTENAV TAIRFLFGL GPLVAVASCH SALLCWAARR CRPLGTAIVV GFFVCWAPYH LLGLVLTAA PNSALLARAL RAEPLIVGLA LAHSLNPML FLYFGRAQLR RSLPAAACHWA LRESQQDES VDSKKSTSHD LVSEMEV atgtgggccc ctgtgtct gggcctcagc ctgtggctc tctgtacc tgggagggg gcccattgt gctgtcaca gcaactagg atgaaggggg actacgtct gggggggctg tttccctgg gcagggccga ggaagcttggc ctccgagcc ggacacggcc cagcagccct gttgtcacca ggtacagagg tgggacgggc tgggtgggg tcaagggtgac caggtctggg gtgtcttga gctggggccc aggtgtggcat ctgtgggttct gttggggccc aggttctct caaaggcct gctctgggca ctggccatga aaatggccgt ggaaggagatc aacaacagt cagatctgt gcccgggctg cgtctgggct acgacctt tgalactgctc tgggagcctg tggggccat gaagcccagc ccatgttcc tggccaaggc aggcagccgc gacatggccg</p>	Homo sapiens

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594

190484 G Protein-
Coupled Receptor
Ls190484 LG95579

Homo
sapiens

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595

190484 G Protein-
Coupled Receptor
Ls190484 ENSMPRT2619 43

Homo
sapiens

MEADLGATGH RPRTLEDDED SVYQGGWDTV FLVALLLGL PANGLMAWLA P
GSQARHGAGT RLALLLSLA LSDFLFLAA AFQLEIRHG GHWPLGTAAC
RFYYFLWGV YSSGLFLAA LSDRLCLAL CPHWYPGHRP VRLPLWVCAG
VWVLAITFSV PWL VFPEAAV WWYDLVICLD FWDSEELSLR MLEVLGGLP
FLLLVCHVL TQATACRTCH RQQPAAACRG FARVARTILS AYVVLRLPYQ
LAQLLYLAF WDVYSGYLL W EALVYSDYL LLNSCLSPFL CLMASADLRT
LLRSVLSSFA AALCEERPGS FTPTPQTQL DSEGPTLPEP MAEAQSQMDP
VAQPQVNPTL QPRSDPTAQ QLNPATAQPS DPTAQQLNL MAQPOSQSDVA
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597	190595	G Protein- Coupled Receptor SH120	NP_057418.1	aggtcgagg cggcgctgcg tggagcgggg ggcgcggcg cgcgcgagag atgtgacatg ggcggaaggc cagctggagc gtcgcgctg cggggccgcg ggggtcgaat gttgtggca tcaagagaga agatagagag tcaacagggt ctaacttcc tctgtctt cgtatcacc tgggtggcct ctgaaaagc cagcatc ccaggtctg ggttgagact cctccctcag tactgtccc tgtcgact ggaagccatc tggggcatg tggtagagc ggttggccgg ggcggcgccc tgaatcact gctcctgat ctaactcc tgggtggct gcccctc aaggagaaag agaaagagag cctgtgggc ctaacttcc tgttctct ggggacccg ggccttttg ggttgactt gcttctct cctgtctct cctgtctct acacaggag acgagacat cgtctgtc cgccgttcc tctggggcgt ccttttgcg cttgtctct cgtgtgtg cgtgtgtg cgtgtgtg ggtgtgtg ggtgtgtg gggcatggc agggggcccg cggggcggga gctgtgtg cgtgtgtg ggtgtgtg ggtgtgtg ggtgtgtg tggagtggct ggtgtgtcacc ggtgtgtcgg acacaaggcc agcctgtgcg taccagccca tggacttgt gatggccctc	P	Homo sapiens
598	190599	G Protein- Coupled Receptor GPC5B	NM_016235	aggtcgagg cggcgctgcg tggagcgggg ggcgcggcg cgcgcgagag atgtgacatg ggcggaaggc cagctggagc gtcgcgctg cggggccgcg ggggtcgaat gttgtggca tcaagagaga agatagagag tcaacagggt ctaacttcc tctgtctt cgtatcacc tgggtggcct ctgaaaagc cagcatc ccaggtctg ggttgagact cctccctcag tactgtccc tgtcgact ggaagccatc tggggcatg tggtagagc ggttggccgg ggcggcgccc tgaatcact gctcctgat ctaactcc tgggtggct gcccctc aaggagaaag agaaagagag cctgtgggc ctaacttcc tgttctct ggggacccg ggccttttg ggttgactt gcttctct cctgtctct cctgtctct acacaggag acgagacat cgtctgtc cgccgttcc tctggggcgt ccttttgcg cttgtctct cgtgtgtg cgtgtgtg cgtgtgtg ggtgtgtg ggtgtgtg gggcatggc agggggcccg cggggcggga gctgtgtg cgtgtgtg ggtgtgtg ggtgtgtg ggtgtgtg tggagtggct ggtgtgtcacc ggtgtgtcgg acacaaggcc agcctgtgcg taccagccca tggacttgt gatggccctc	A	Homo sapiens

599	190599	G Protein-Coupled Receptor GPCR5B	NP_057319.1	<p>atctacgaca tggtaactgct tgggtacc ctagggcctgg ccctcttacc tctgtgcggc aagttcaaga ggttggaagct gaaaggggcc ttctctca tcacagcctt cctctctgt ctcacttggg tggcctggat gaccatgtac cttctggga atgtcaagct gcagcagggg gattccctgga acgacccac cttggccatc acgtctggcgg ccagctggcgt ggtcttctgt atctccacg ccatccctga gattccactgc acccttctgc cagccctgca ggaagacacg cccaactact tggacacgtc gcaagccacgg atgcggggaga cggccttcca ggaagacgtc cagctggcg gggccctat ggaagaacaa gctcttcca tggatgaca caatgcaagct ctcgaacag caggaatcc caacggcagc tgggaaaaa gacccagtg cagcttgggg aaaaagacca ggcctccgt tagaagcaac gttatcagc caactgagat ggcgtctgtg ctaacgttg ggaacatccc aactgctccg ccaagtcaca caggaaagaca ccttgggtga aagactttaa gttccagaga atcagaatt ctttaccga ttgctctcc tggcgtgtc tttctgagg gagaatacgg taacagttgc gaaaccaagg ccctcacag caggaatct tggaaatct agccaaagggg attctgtga aatgtgaaca ctgacgaact gaaaaactaa caccgactgc ccggccctcc cctggccac acacagacac gtaataccag accaactca atcccgcga actaaagcaa agctaatgc aatagtaatt aggtctacgt gaaaatgtgg ctgggaagac tgtttatcc tctgggggta gaacagaacc aaattcacag ctggggggcc agactgtgtt tggttggagg tggggggctc ccactctat caactctcc cagcaagtc tggacccag gtagccctt ggaagatgacc gttgcgtga ggacaaatgg ggaattggc accggcttc cttgggtt gacattca gggggggcag gaaagttaag gagggtgtgg gtgggattcc aagggtgagg ccaactgaat cgtgggggta gctttatgc cagtgaagggt ggaaggggacc tggcaltgc caaaagaaag gcccctggg tgaigaagtc accatcacat tggaaagtc atcaaccact gtccttcta gggggctct gcttaatgt ctatgtgtg aacacaggg ccggccctc cttgtagag ccatagaat attctggctt gggggcagcag tccctctc cctgaltat ctgcctgt tctacact acgggtgtat ctccaatc tctccaat ttatccct attactta agagctccaa tggggctcc agctgaaag ccctccggga ggcaggttgg aaggcagga ccaagcgagg ttccggga tgaatgac tagcaggctc tcaagggttc ccactagat gcaagatga cctctgcgt cctcacagc agtgacacct cgggtccctt ccgtgtctat ggtgaaat cctggaatga atggaatcaca tgaagggtc ttgtgtctt tgaagggtgt ggggggalt ttgttgggt ttttctcag gttccatgaa aacagccct ttcaagcc attgtctg tcaagttc catgtctt gagaagica ttcttgtt attagcat tgaacatc cggccattca aagcccat gttcttga cttgtggc agcalaact ctacatga ttaaaagcag agtttaacc tgaaggcat gaaatataa atgagggtgg gttcttgc agatactat atcatatc tcttttt ataaaaac ccataagct ttaactta aaaaaaag aaaaaggta gtttgggg gccggggggg gacigaccgc ttcaagcc agtagctgc agctagat gttcaata accittgt atttcaaa aaaaaaaa aaaaaaaa MFVASERKMR AHQVLTFLLL FVITSVASEN ASTSRGCGLD LLPQYVSLCD P Homo sapiens</p> <p>LDALWGVVE AVAGAGALIT LLLMLILLVR LPFIKEKEK SPVGLHFLFL LGTGLFGLT FAFIQEDET ICSVRRFLWG VLFALCFSL LSQAWRVRL VRHGTGPAGW QLVGLALCLM LVQVIA VEW LVTVLDRDTR PACAYEPMDF VMAIYDMVL LVVTLGLALF TLCKFKRWK LNGAFLITA FLSVLIWVAV MTMYLFGNVK LQQGDWNDP TLAITLAASG WVFVIFHAIP EIHCTLLPAL QENTPNYFDT SQPRMRETA F EEDVQLPRAY MENKAFSMD E HNAALRTAGF PNGSLGKRPS GSLGKRPSAP FRSNVYQTE MAVVLNNGGTI PTAPPSHTGR HLW gtggctcga ggtgtggga gggcgccccc ctgacggccc gagaagaa cagggacgg gctccggag gcaagttcgg ctggaggaa cgcctctgc ttgctctac acttgcgcaa atgtctcga gcttactac atagcatatt ggtatataa aatgaaatgc aagggaacca aataacata attgaaggca gtaaaagta aattaaatag gaaagatc agtcaaggaa gaccacatgg agaggacaga aatgaagca gttttatc atgtgtatt cagcaggtct tctgaaat taactaaaa tatgactgt cttctcag agaactgtc tttagtac cagtacgt aaacaaoca gccctagac gtaactatc tctattct gatacatat ggggaaalat tataaatal cctacacta ggaatgaga gaaaaaac cttcaaat ttatggaat attttgcat ttactagca ttgtgtac</p>	
600	190602	G Protein-Coupled Receptor GPCR150	NM_014373	<p>gtggctcga ggtgtggga gggcgccccc ctgacggccc gagaagaa cagggacgg gctccggag gcaagttcgg ctggaggaa cgcctctgc ttgctctac acttgcgcaa atgtctcga gcttactac atagcatatt ggtatataa aatgaaatgc aagggaacca aataacata attgaaggca gtaaaagta aattaaatag gaaagatc agtcaaggaa gaccacatgg agaggacaga aatgaagca gttttatc atgtgtatt cagcaggtct tctgaaat taactaaaa tatgactgt cttctcag agaactgtc tttagtac cagtacgt aaacaaoca gccctagac gtaactatc tctattct gatacatat ggggaaalat tataaatal cctacacta ggaatgaga gaaaaaac cttcaaat ttatggaat attttgcat ttactagca ttgtgtac</p>	A Homo sapiens

601	190602	G Protein- Coupled Receptor GPCR150	NP_055188.1	<p>tttttctttt ggtaaacatt tccattatatt tgaatttgta ctttaagca ttaggatcac taaataccac atctgcccatt tactcaaat tatttccttt actatggctt tttagcatta tccagtttc ctgacagctt gtagagatta ttgccigaal tictataaa caaccaagct ttcatthaag tgcataaaat tattttatt ctttaacagta atttaattt ggatttcagct ccttgcttat gttttggggag accagagcat ctaccaaaagc ctgaagggaac agaatgctta ttcttgatc tgcctttct atgcagcat tcaagattac tggctgtcat ttttcatlgt gattgattta ttgttagctt tcaataccgt ttgggaagaa gttactact tggatcaggc tatcaggata acttociata tgaalgaac tatcttatat ttctctttt catccacac cagttatct gtagagacta aaaaaatatt ctatccaag ctcatlgtct gtttttcag tacttggtta ccatlgttac tactcaggtt aatcatlgt ttacttaag ttacagtttc agcatatatt gtagatgaata ttccctgggt alactttgtc aatagtttc tcaatgttat agtgaattgg tttaattgtc acaagcttaa tttaaaagac attggattac ctttggatcc attttgcaac tgggaagttct gcttattcc acttaaat ctaattctg agcaaatga aaagccata tcaataatga tttgaata ttataatla aaagttaacag ctgtcataag alcataatt tatgaacaga aaagactcag gacatatata aaaaataat gaactaaaac aactttggcc ccttgacga tagcatlta gaaigtgtct ttgaagggtc tatccaggtt attaaatagt gttttttt aaaaacaaa taattccaag aagtttttat agttattcag ggacacata ttacaatat tactttgta ttaacacaaa aagtgataag agttaaact ttgctatact gattttgtg ttactcaaaa aaactactgg atgcataatg ttatgaat ctgaagatttc actgacaact ttaagataic aactataca ttittataa atgtcaaat gtaagcaaga aaaaaaaa</p> <p>MTALSSNCFSQYQLRQTNQ PLDVNYLLFL IILKILLNI LTLGMRKNT CQNFMEYFCI SLAFVDLLL VNISILYFR DFVLLSIRFT KYHICLFTQI ISFTYGFLHY PVFLTACIDY CLNFSKTTKL SFKCQKLFYF FTVLIIWISV LAYVLGDPAL YQSLKAQNAV SRHCPFYVSI QSYWLSFFMV MILFVAFITC WEEVTTILVQA IRITSYMNET ILYPFSHS SYTVRSKKIF LSKLIVCFLS TWLPFVLLQV IIVLLKVQP AYEMNPWL YFVNSFLIAT VYWFNCHKLN LKDIGLPLDP FVNWKCCFIP LTIPNLEQIE KPISIMIC</p>	P	Homo sapiens
602	190623	Melanopsin	AF147788	<p>ggttccacc catcagacca cagctttcag ccaggacagc ttggggcagca gtagtcatag gagacatctg gagggctgagg cttccacgc ggccctctctg gctccatttg atggcaggctt ccggggcagac gagctgocag gtaggggtgtgg gtagcaaaagg tttggagcga gagcgcctatg gggaagcttc ccagttggggc agaaagcacaag gtagtgaagggg gttggggcctt gaggaagatc cagttgtacc cgcacagggct gacagtgacag gcccatggag aaagagacatt aagttggtag acgttgggctt ccaaggccc caggtctgggg gttccgagtc ctctgactt tccctgaggt gctcttga ggctgtggc accctgggta tgttggattc cgcctcalt gtccacttga caagcacitc tccctggag tccctgtgct gctccatcac ctgcacccctc tcttaattag cagggttggag agtgggggtcc acattgaatg ggacgtttgt ttgactaga attgtctoca gctgtgagga attgttaaac ccttacatta aaacgcacagc agcttggcatl gtagcttaggg acagaaagaa aagccggccc ctacgtctca cccggccccc aggggtggcct ctgttagcga aagccctgaa gtgggaagagc ctacaggagga agggcagttctg agccatgggg tggcagctctg aggaagata gtcccccctc ccagttgaggc tggctccact tctctgtct aaacctgggg ctccagggaga acgtttttgta aagactgggg ggaactctgg aagagggagtgt alactctgt ccactccagg gctccaacac tccacagcat gttgccagggac atggccccca cttaggata ccgctggccc gtcgggctcc cctaaacgca gccctctgtg gacaggcctag cccgagcagc cctccctgga agccctgtgt tcaactccc tctctcag ctccctcgtc ctctcttaag acagggcagaag ggggcaggccc gggtgtccct ccacttctga catocagica ggcttgcagg cctgggtgag ttcttgggag ttccccaata aggttttaaa aaatcttat actttaaaa ttctgtccgg gccacgtggc tcacgtctt aatccgggca cttggggag ccgaggggtgg tggatcacct gaggtcagga gttcagagact agcctggcca acatgggtgaa ctcttggctc tcttaatat acaaaaata gccaggtgtgt gtggcaggtgt cctgtaacc cagctactc gggaaggctgag gcagggagaa ttcttggacc tggggagcgg aagttgcagt gagctgagat tgcacattg catccaggc tgggtgacag agcaagactg tctcaaaaa aataaaaaa aaaaaataa actttctat caaaaaacaa gcaaaaggccg cctctgtgac tgaatcacc atctctctt tgtctccatc tggtaagggg</p>	A	Homo sapiens

[illegible]

[illegible]

604	190627	G Protein- Coupled Receptor GPR41 & GPR42	NM_005304	GTWAAA WVPL PTVDVPDHAH YTLGTVILLV GLTGMLGNLT VYTFCSRSS LRTPANMFII NLAVSDFLMS FTQAPVFFTS SLYKQWLFGE TGCEFYAFCG ALFGISSMIT LTAIALDRYL VITRPLATFG VASKRRAAFV LLGVWL YALA WSLPFFGWS AYVPEGLTS CSWDYMSFTP AVRAYTMLLC CFVFFLPLLI IYCYIFIR AIRETGRALQ TFGACKNGE SLWQRQLQS ECKMAKIMLL VILLFVLSWA PYSVALVAF AGYAHVLTPY MSSVPAVIAK ASAIHNPIY AITHPKYRVA IAQHLPCLV LLGVSRHRSR PPSYRSTRH STLTSHTSNL SWISIRRRQE SLGSESEVGV THMEAAA VVG AAQQANGRSL YGQGLEDEA KAPRPQGHE AETPGKTKGL IPSQDPRM	sapiens
				atggatagag gccccgacaa gtctacttc tccgggaac acgggttcgt ctctcgtg taccitctca cttctctggt ggggctcccc ctcaacctgc tggcccttgg agttctgtg ggaagctgc agggccgccc ggtggccgtg gacgtgtcc tgcctaacct gaccgctcg gacctgcctc tgcgtgtgt cctgcttcc cgcaltgttg aggcagaccaa tggcaltgcac tggccctgc cttctacct ctgccactc tctgtatca tctcttcc caccatcat ctacccgcc tctctggc agctgtgagc attgaacgt tcttgagtgt gggccaccaa ctgtgtgtaca agaccggcc gggctggggc caggcaggtc tgggtgagtgt gggctgtctg cgtgtggct ctgtcactg cagcgtgtg tacgtcalag aattctagg ggaatctcc cagaccaggg gaccaatgg gacctgtac ctggagtcc ggaaggacaa gctagccatc ctctggccc tggcgctgga gtaggtgtg gtcctttg tggctccgt gatcacc agctactgt acagccgct ggtgtggtac ctggcgagag gggcgagcaga ccgcccggcag aggaggggtg cggggctgtt gggggccag cgtctaac tctgtctg ctgtgtgccc tacaacgtgt ccatgtgt gggtatct tgggtgaaa gccggcgtg gaggatctac gtgagcttc ttagccctt gaactctgt gtcgacct ttgtacta ctctctc tccgggtcc aggcgacti tcatgagctg ctgagagagt tgtgtgggt ctggggccag tggcagcagg agagcagcat ggaagtgaag gagcagaagg gaggggagga gcaaggagcg gaaccgaccag ctgaagaa gaccagaa caticacagg cctgtgaac tgggtggcag gtagcctgt ctgaagcta g MDTGPDSYF SGNHWFVFSV YLLTFLVGLP LNLALVVFV GKLQRRPVAV DVLLNL TAS DLLLLFLPF RMVEAANGMH WPLPILCPL SGIFFTTY LTALFLAAVS IERFLVAHP LWYKTRPRLG QAGLVSVACW LLASAHCSVV YVIEFGDIS HSQGTNGTCY LEFRKDQLAI LLPVRLEMAV VLFVVPLIT SYCYSRLVWI LGRGGSHRRQ RRVAGLLAAT LLNFLVCFGP YNVSHVVGYI CGESPAWRIY VILLSTLNSC VDPFVYFSS SGFQADFHEL LRLCGLWGQ WQOESSMELK EQKGGEQRA DRPAERKTSE HSQGCCTGGQ VACAES caagactgt cctcttgc gactaaca gattgagcc atggcttgg agcagaaca gtaacagat tattatag aggaaatga aatgaatgg actatgact acagtaata tgaatgac tgaataag aagatgac agaatgtga aagtttcc tctgttati cctcaata gttttgca tggactgc agcgaatcc atgtagtgg caattatgc ctattacag aaacagaga ccaaacaga tgtgtatc cigaatttg cgtgagcaga ttactctt ctaltcac tgcctttg ggtgtgtat gcagttcatg ggtgtgtt agggaaala atgtgcaaaa taactcagc ctgtacaa ctgaacttg tctgtggaat gcaggatcat cgttttgt gcatagacag atatgtgca gtaactaag tcccagcca alcaaggagtg ggaataacat gcaggatcat cgttttgt gtctggatg cggcatct gctgagcata cccagcttg ttattatc agtaatgac aatgtagggt gcaatccat ttccccgc tacclaggaa calcaatga agcatgtat caaatgtag agatgtcat tggattga gtaccttc ttattatgg ggtgtgtac ttatcacag caaggacat catgaagatg ccaaacatia aaatatctg accctaaaa gttctgtcta cagctgtat agtttcat gtactaac tgcctataa catgtcaag tctgcccag ccatagacal ctagtacct ctagacaa gctgcaacat gagcaaacg atggacalog ccatcaagt cacagaaag atgcactct ttacacgtg cctcaacca atccttatg	Homo sapiens
605	190627	G Protein- Coupled Receptor GPR41 & GPR42	NP_005295.1	atggatagag gccccgacaa gtctacttc tccgggaac acgggttcgt ctctcgtg taccitctca cttctctggt ggggctcccc ctcaacctgc tggcccttgg agttctgtg ggaagctgc agggccgccc ggtggccgtg gacgtgtcc tgcctaacct gaccgctcg gacctgcctc tgcgtgtgt cctgcttcc cgcaltgttg aggcagaccaa tggcaltgcac tggccctgc cttctacct ctgccactc tctgtatca tctcttcc caccatcat ctacccgcc tctctggc agctgtgagc attgaacgt tcttgagtgt gggccaccaa ctgtgtgtaca agaccggcc gggctggggc caggcaggtc tgggtgagtgt gggctgtctg cgtgtggct ctgtcactg cagcgtgtg tacgtcalag aattctagg ggaatctcc cagaccaggg gaccaatgg gacctgtac ctggagtcc ggaaggacaa gctagccatc ctctggccc tggcgctgga gtaggtgtg gtcctttg tggctccgt gatcacc agctactgt acagccgct ggtgtggtac ctggcgagag gggcgagcaga ccgcccggcag aggaggggtg cggggctgtt gggggccag cgtctaac tctgtctg ctgtgtgccc tacaacgtgt ccatgtgt gggtatct tgggtgaaa gccggcgtg gaggatctac gtgagcttc ttagccctt gaactctgt gtcgacct ttgtacta ctctctc tccgggtcc aggcgacti tcatgagctg ctgagagagt tgtgtgggt ctggggccag tggcagcagg agagcagcat ggaagtgaag gagcagaagg gaggggagga gcaaggagcg gaaccgaccag ctgaagaa gaccagaa caticacagg cctgtgaac tgggtggcag gtagcctgt ctgaagcta g MDTGPDSYF SGNHWFVFSV YLLTFLVGLP LNLALVVFV GKLQRRPVAV DVLLNL TAS DLLLLFLPF RMVEAANGMH WPLPILCPL SGIFFTTY LTALFLAAVS IERFLVAHP LWYKTRPRLG QAGLVSVACW LLASAHCSVV YVIEFGDIS HSQGTNGTCY LEFRKDQLAI LLPVRLEMAV VLFVVPLIT SYCYSRLVWI LGRGGSHRRQ RRVAGLLAAT LLNFLVCFGP YNVSHVVGYI CGESPAWRIY VILLSTLNSC VDPFVYFSS SGFQADFHEL LRLCGLWGQ WQOESSMELK EQKGGEQRA DRPAERKTSE HSQGCCTGGQ VACAES caagactgt cctcttgc gactaaca gattgagcc atggcttgg agcagaaca gtaacagat tattatag aggaaatga aatgaatgg actatgact acagtaata tgaatgac tgaataag aagatgac agaatgtga aagtttcc tctgttati cctcaata gttttgca tggactgc agcgaatcc atgtagtgg caattatgc ctattacag aaacagaga ccaaacaga tgtgtatc cigaatttg cgtgagcaga ttactctt ctaltcac tgcctttg ggtgtgtat gcagttcatg ggtgtgtt agggaaala atgtgcaaaa taactcagc ctgtacaa ctgaacttg tctgtggaat gcaggatcat cgttttgt gcatagacag atatgtgca gtaactaag tcccagcca alcaaggagtg ggaataacat gcaggatcat cgttttgt gtctggatg cggcatct gctgagcata cccagcttg ttattatc agtaatgac aatgtagggt gcaatccat ttccccgc tacclaggaa calcaatga agcatgtat caaatgtag agatgtcat tggattga gtaccttc ttattatgg ggtgtgtac ttatcacag caaggacat catgaagatg ccaaacatia aaatatctg accctaaaa gttctgtcta cagctgtat agtttcat gtactaac tgcctataa catgtcaag tctgcccag ccatagacal ctagtacct ctagacaa gctgcaacat gagcaaacg atggacalog ccatcaagt cacagaaag atgcactct ttacacgtg cctcaacca atccttatg	Homo sapiens
606	190701	C-C Chemokine Receptor 11	NM_016557	atggatagag gccccgacaa gtctacttc tccgggaac acgggttcgt ctctcgtg taccitctca cttctctggt ggggctcccc ctcaacctgc tggcccttgg agttctgtg ggaagctgc agggccgccc ggtggccgtg gacgtgtcc tgcctaacct gaccgctcg gacctgcctc tgcgtgtgt cctgcttcc cgcaltgttg aggcagaccaa tggcaltgcac tggccctgc cttctacct ctgccactc tctgtatca tctcttcc caccatcat ctacccgcc tctctggc agctgtgagc attgaacgt tcttgagtgt gggccaccaa ctgtgtgtaca agaccggcc gggctggggc caggcaggtc tgggtgagtgt gggctgtctg cgtgtggct ctgtcactg cagcgtgtg tacgtcalag aattctagg ggaatctcc cagaccaggg gaccaatgg gacctgtac ctggagtcc ggaaggacaa gctagccatc ctctggccc tggcgctgga gtaggtgtg gtcctttg tggctccgt gatcacc agctactgt acagccgct ggtgtggtac ctggcgagag gggcgagcaga ccgcccggcag aggaggggtg cggggctgtt gggggccag cgtctaac tctgtctg ctgtgtgccc tacaacgtgt ccatgtgt gggtatct tgggtgaaa gccggcgtg gaggatctac gtgagcttc ttagccctt gaactctgt gtcgacct ttgtacta ctctctc tccgggtcc aggcgacti tcatgagctg ctgagagagt tgtgtgggt ctggggccag tggcagcagg agagcagcat ggaagtgaag gagcagaagg gaggggagga gcaaggagcg gaaccgaccag ctgaagaa gaccagaa caticacagg cctgtgaac tgggtggcag gtagcctgt ctgaagcta g MDTGPDSYF SGNHWFVFSV YLLTFLVGLP LNLALVVFV GKLQRRPVAV DVLLNL TAS DLLLLFLPF RMVEAANGMH WPLPILCPL SGIFFTTY LTALFLAAVS IERFLVAHP LWYKTRPRLG QAGLVSVACW LLASAHCSVV YVIEFGDIS HSQGTNGTCY LEFRKDQLAI LLPVRLEMAV VLFVVPLIT SYCYSRLVWI LGRGGSHRRQ RRVAGLLAAT LLNFLVCFGP YNVSHVVGYI CGESPAWRIY VILLSTLNSC VDPFVYFSS SGFQADFHEL LRLCGLWGQ WQOESSMELK EQKGGEQRA DRPAERKTSE HSQGCCTGGQ VACAES caagactgt cctcttgc gactaaca gattgagcc atggcttgg agcagaaca gtaacagat tattatag aggaaatga aatgaatgg actatgact acagtaata tgaatgac tgaataag aagatgac agaatgtga aagtttcc tctgttati cctcaata gttttgca tggactgc agcgaatcc atgtagtgg caattatgc ctattacag aaacagaga ccaaacaga tgtgtatc cigaatttg cgtgagcaga ttactctt ctaltcac tgcctttg ggtgtgtat gcagttcatg ggtgtgtt agggaaala atgtgcaaaa taactcagc ctgtacaa ctgaacttg tctgtggaat gcaggatcat cgttttgt gcatagacag atatgtgca gtaactaag tcccagcca alcaaggagtg ggaataacat gcaggatcat cgttttgt gtctggatg cggcatct gctgagcata cccagcttg ttattatc agtaatgac aatgtagggt gcaatccat ttccccgc tacclaggaa calcaatga agcatgtat caaatgtag agatgtcat tggattga gtaccttc ttattatgg ggtgtgtac ttatcacag caaggacat catgaagatg ccaaacatia aaatatctg accctaaaa gttctgtcta cagctgtat agtttcat gtactaac tgcctataa catgtcaag tctgcccag ccatagacal ctagtacct ctagacaa gctgcaacat gagcaaacg atggacalog ccatcaagt cacagaaag atgcactct ttacacgtg cctcaacca atccttatg	Homo sapiens

607	190701	C-C Chemokine Receptor 11	NP_057641.1	<p>ttttatggg agcatcttic aaaaaciagc ttatgaagaagg ggcacagaaa tatgggtcct ggagaaagaca gagacaaagt gtggaggaggt ttcttttuga ttctggagggt cctacagagc caaccagatc tttagcatl taaggtaaa actgctctgc ctttgcttg gatacatag aalgatgcti tccctcaaaa taaaacatct gcatlactt gaaactcaaa tctcagagc cglgttgca actataata aagaaagggt tgggggaagg gggagaata aagccaaga apagggaaca agataataa tgcataaac algaaaaa aaatgaaca tataggaaa taattgaac aggcataagt gaataacact ctgctgaac gaagaagagc ttgtgtgga taatttga tcttggtgc agtgggtgcti atacaatct acacaagga taaaagaga taaatgaga cagaataata tacacacat gtaacaatt caatttccg gtttgacat tatagtataa ttatgaaga tgggaaccatt ggggaaaact ggggaaggg taccacagc cacttgatc cacttgta acttctg agttatatt aattcaaa taaacaagt laaaaaaaa cccactatgc tataagtag gccatataa acagattatt aaagaggctc atgtataaag gcatlataa ttattttaa tatlaagt ttatataa gaacgatttc ctgcataat tttagtact gaataagtat gcagcagaac tccaactatc ttuttcg ttutttaa atttgaagt aatttataa aatccacctc ctcacaaaaa gcaataaaaa aaaaacaaac tataaaaaa aaaaaaaa aaaaaaaa aaaaaaaa aaaaaaaa aaaa</p>	P	Homo sapiens
608	190705	G Protein- Coupled Receptor SALPR	NM_016568	<p>MALEQNQSTD YYYEENEMNG TYDYSQYELI CIKEDVREFA KVFLPVFLTI VFVIGLAGNS MVVAIYAYK KQRTKTDVYI LNLAVADLL LFTLPFWAVN AVHGWVLGKI MCKITSALYT LNFVSGMQFL ACISIDRYVA VTKVPSQSGV GKPCWICFC VWMAAILSI PQLVFTYVND NARCIPIPR YLGTSMKALI QMLEICIGFV VPFLMGVCY FITARTLMKM PNKISRPLK VLLTVVIVFI VTQLPYNIVK FCRADIIYS LITSCNMSKR MDIAIQVTES IALFHSCLNP ILYVFMGASF KNYVMKVAKK YGSWRRQRQS VEEFFDSEG PTEPTSTFSI gatttgggga gttatggcc agtggccagc tgaacggggc acacggagag gggaagcttg cgttgatcat aagagacag ggactocgag ctgggcttga gaaoccttg agccggagtg ctggcttac gggctgcatc cctcaactt gctccaaagc agccgctgag ctaactct gctccaggg cgttcgctgc ggcacagagc ggccttagta cccagttctt gggctctc ttcagtagct gcttgaag ctccagca cgtccggcag gctagccttg caacaaact ggggttaaac gttatctt aggctctgic cccagaaca tgaactagag gtacctgagc atgcagatgg cc-gatgagc cactgagcc accalgaala aaggcagcagg cgggggacaag ctgacagaac tctcagctt ggtccgggag ctccggagc cggccaacac gtagtggtaac gcgtctgic agcttccgga ctgtgtgttg gtagctggggc tggagttggc ggaagggcggc cggccaagc atccccggg cagcggcggg gcaagagagc cggacacaga gggccggggc cggatctca tcaagctggg gtagtgggg gtagtgggg tggggttggc gggcaacctg ctggctctt accatgaa gtagcagcag ggcctggcga agtctctat caaccttc gtcaacaac tggcgtgac ggaattttag ttgtgtctca ccttggcctt cgggggggg gtagaacgctc ttgacttca atggcccttc ggaaggcca tggtaagat cgtgtccatg gtagcgtcca tgaacatga cggcagcgtg ttcttctca ctggccatgag tggagcggc taccatggc tggccctggc tctgaagagc caccgggac gaggagacggc cgggggggac tgcctgggccc ggaagctggg ggaacagctgc tgcctcggc ccaaggcgtc gttgtgttg alctgggctt tggcggcgtc ggcctcggc cccagtgcca ttctccac cagggtcaag gtagtggggc agtagctgct cctgtgtgtt ttccgggaca agtgtgtggc cggcagagc cagttctggc tgggcctca ccatggcag aaggtgtgtt tgggcttctt gctggcggc ggcatatta tctgtgtc cctgtgtc gttgtgtc tgggcctca tggcggacgg cggcggcggc gtagggggcggc ggtaggggga ggaagggcga cggggggcga cggcggggga ctgtgtgttg tcaacaalc agtgaacalc gttgtgtt ccttctct gttgtgtc ccaacaggc cgtcaccac ctggagcctc ctacatggt tcaacgggt tcaacgggt caggagattt tctgtgtc ggtatagcgt ttctgtgta gctgtgtg agcgtctc aacagctgct tcaacgggt ccttctagc ctgtgtggc gcaaggttccg caagggcgtc aaggtgtgtc tggggggcgt cgtgtgtctt tggatcaca gcalggggcc cttcaggcc actacaagg cggagagcaga ggtatcaggggg ctgcaaggccc cggcggggcc ccaaggggcc</p>	A	Homo sapiens

609	190705	G Protein-Coupled Receptor SALPR	NP_057652.1	P	Homo sapiens	<p>ggggagccgg accgtctcia ciaccacct ggccgtctggg lctacagcgg ggggcgctac gaactgtctc ccagcagctc tgcctactga cgcagccctc agggccaggg cgcggccgtc ggcaagggg gctctcccg ggcgtaag aggtgaagg atgaaggagg gctgggg</p> <p>MQMADAAATIA TMNKAAGGDK LAELFSLVPD LLEAANTSGN ASLQLPDLWW ELGLELPDGA PGHPGSGG AESADTEARV LLSVVYVW VCALGLAGNL LVLYLMSMQ GWRKSSINLF VTNLALTDFQ FVLTLFWAV ENALDFKWPF GKAMCKIVSM VTSNMVYASV FFLTAMSVTR YHVSASALKS HRTRGHGRGD CCGRSLGDSC CFSAKALCVW IWALAALASL PSAFSTTVK VMGEELCLVR FPDKLLGRDR QFWGLYHSQ KVLGFLVPL GHILCYLL VRFIADRRAA GTKGGAAVAG GRPTGASARR LSKVTKSVTI VLSFFLCWL PNQALTTWSI LIKFNAPFS QEYFLQVYA FVSVCLAH NSCLNPVLYC LVRREFRKAL KSLWRIASP SITSMRPFTA TTKPEHEDQG LQAPAPPHAA AEPDLLYYP GVVYSGGRY DLLPSSAY</p>
610	190711	G Protein-Coupled Receptor GPR85 (SREB2)	NM_018970	A	Homo sapiens	<p>ggcagaggga ttacttgt gctcaagat cagattatta cgtagagaa gatttttt ttgtttca ttaacagatt attaaagc aaaaagcatg cagaaaaaga agcagacgt ttacattggg aattatgaa agcggtctc ctagtttgg gtaggagaa tgggaagtgt ttgttaaaa ttatata caaccaaa caaaactt cggaaatgg aataaagaa aalgcatgat lctagaggca ttactaagca cccagctga agccttgg gctgttgg taltccga ccgtttggac tggtagggc ttactagag ctcacttct ggaaagcctt acaagactga ggaataatcag actgcaatc accgggaac gttcttgc agcacagaag caatctct cccccttc gcalattctg atggcaaac aagtggaaga aagagggaag calgactga gatcagatca gttcttgg tggattat ttcaagaa atgattgat ctactttt ctgtttta tctagatc atgagactg actgaggctg taltcttalc ctccatccat ctatggcga ctatgcat gcaactgaca acatttga aaactctcg ccttaacag ctttttgaa actgacttc ttgggttca taataggagt cagcggtgg ggcaacttc tgaictcat ttgttagtg aaagataaga cttgtcatag agcaactac tacttctgt tggatcttg cgttcagat atccatgat ctgcaattg ttccattt gtttcaact ctgtcaaaa tggcttacc tggacttalg ggactctgac ttgcaagtg atgcttct tgggggttt gttcttgc cacactgtt tcalgtctt ctgcacagt gtccacagt actagctat cgtccatcac cgttttata caaaggaggt gacctttgg acgttctgg ctgtgtatg tatgtgttg acttctctg tggccatggc atttcccc gttttagc tgggcaacta ctacttatt agggaggaag atcaalgcac ctccaacac cgctcttca gggtataga ttactagga ttatgtctg ttctgtct calctctta gccacacag ttgtctacct caagtctgata ttttctgoc acgatcgaag aaaaatgaag ccagttccagt tttagcagc agtcagccag aactggactt ttatgttcc tggagccagt ggccagggcag ctgccaattg tttagcagga ttgggaagg ggccacacc acccaacttg ctgggcatca ggcaaatgc aaacaccaca ggcaagaaga ggctattgtt cttagacgag ttcaaatgg agtaaaagaa cagcagaatg ttctataa tgaatttct gtttctacc ttgtggggcc cttactgtt ggctgttt ttgagaggtt ttgcaagagg gctgttagta ccagggggat tttaacagc tgcgtctgg atgagtttg ccaagcagg aatcaalct ttgtctgca ttttcaaa cagggagctg aggcgctgt tcaagcaac cttctttac tgcagaaaat ccaagttacc aagggaact tactgtgta tatggggag calctgtaaa tcttagcct tgggaact aacttctt gctgagcaat tggggccat agccattt tgaagaagaa ttcaagaatg gaalcaagcag tttaaggt ttgggaaca ttctgcagc ttgcaatg ttacattat atctattt aaatctcaga gtatcctgc tgaatgccag caaaggttg taataagaa gggaactgaac cactgacctt agttttta ttgtgtcaaa aactagataa tgaagtagc aggtgtcag talcagtgt aalgctctg talgtacta calatgaaa aactcaaaa acaattagc atggacatc ttaataaati aagttagat gagggaatg tttgataa aactaattt agaaagtga agacttttaa acatttata ctacttgt ttgcaaga ciataat ttgggactia aagtactga atccactaa gacgtggcaa tgaatttg gaalacaca cttaaaac cgcttgttaa gttctgggga gcaatcaaa gcagatatt ggttccatt ttgtttgt taatacatg ctattctaa</p>

611	190711	G Protein-Coupled Receptor GPR85 (SREB2)	NP_061843.1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
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615	190741	Sreb3	NP_061842.1	P	Homo sapiens
616	190742	G Protein-Coupled Receptor H7TBA62	E32367	A	Unidentified

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MANTTGEPEE VSGALSPSA SAYVKLVLLG LMCVSLAGN AILSLVLKE
RALHKAPYYF LLDLCLADGI RSAVCFPFVL ASVRHGSSWT FSALSCKIVA
FMAVLCFHA AFMLFCISVT RYMAIAHHRF YAKRMTLWTC AAVICMAWTL
SVAMAFPPVF DVGTYKFIRE EDQCFEHRF FKANDTLGFM LMLAVLMAAT
HAVYKGLLLF EYRHRKMKPV QMVPAISONW TFHGPATGQ AAANWIAGFG
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617	190742	G Protein- Coupled Receptor H7TBA62	ENSP00000201 359	<p>aaagcaggga ggcaggcggg gggcgcgaag caacccccc gaggccggcc ctctaccc gtcaccaac cgggacacagag ggacacccgg gggagggggc caagctgaac acactctct tcttgagac caccaggt agggatcttg agtccctgggg agaaagctggc ctctctgccca ggcctgacggg cccctcaggga aaaagctcga tcttgatcc ccaactctgg gttggggaa tggggggggc gggggggctcag atcagagctg gattgagaca agcttaagtc ttatttggga gattgggaaag gattcgtgc gagaataac ctctgggatta tccacaatt gttctgacct ttatccag ttccactcc agttcagat ggaacaaaag gattcgtgc tcattctg ctggcgaag aatcctagg aaactccc laagggttct aggtctatga atcagagggtc agtggccatc tctctcga cccaccccc accitaaaac aggggtalccc ttgtctct ccgggtataa ggcacaaaat ggcagcttc cctgtccca ccttaccatc tcaagggtga ccacitgaac ttgtgctctg caggccctgc agggccctgc gttgtaaaac gctgtagtt ccttgaaagg atggcagggt tgggggtatg ctggaattc cagccctgc caggccctgc gttgtaaaac gttgtgctga cgggaggtgc tgggtctc ccttaaatc aggtattga agaaagtgaag alaatgacaa gttgtaaaac gttgtgctga cgggaggtgc ggcggtataa agaggggggg gggcctgggg aacaggtctg aggtgagggc agaaagcag agactccaga aaggtggtct agttctctt gcccacaaag caaagcccg agtataat tgaaggtcag agcaactgga ttccagctt tacctcagc aaattctt acctctgt acctactgt tctcaactgt aaatggggct actaaagatt taacagtgaa atactgtt agttattt ctgtttgt tgtttgtg ttgagacag agtctgtct tctgcccag gctgggaggt agtgggtga tctcagctca ctgcaacct cgttccccg gttcaagga ttctctggc tcagccctcc gaggagctgg gactacaggc tcccgctacc atggcctggc aattttgt aattttaa ggagacagag ttacacata ttggccaggc tgggtctcaa cctctgacct ctatgtat tacaacct gtaaaatgga gacagagaga gtgtgaggt tacaggctg agccacgca cccggctcag ctatattt tacaacct gtaaaatgga gacagagaga tggggagaaa taagctgtga gctgggagat ggggaggggg aaccatgt cactgggaat gttgtat gttctgaaat ggggataat gaagctcga cataagaac tgaaggtg gcccaggg cccctgaa ggtgtgtt caggagcagg ggtctct tgggtctgt atgagatg alcaatgata aaggttagcc atcagaagg tttctagg ggcagccct agaaaggagg gaggcagagg gaagttag tagagtc MPTLNTSASP PTFWVANASG GSVLSADDAP MPVKFLALRL MVALAYGLVG AIGLLGNLAV LWVLSNCARR APGPSDFV FNLALADLGL ALTLPFWAAE SALDFHWPF GALCKMVLTA TVLNYYASIF LITALSARY WVVAMAAAGPG THLSLFWARI ATLA VWAAA LVTVPVAVFG VEGEVCGVRL CLLRFPSTYV LGAYQLQRVV LAFMVPLGVI TTSYLLLLAF LQRRRRQD SRVVARSVRI LVASFLLCWF PNHVVLWGV LVKFDLVPWN SFYTIQTYV FVITCLAH NSCLNPVLYC LLRREPRQAL AGTFRDRLRL LWPQGGGWVQ QVALKQ atgtacagg actgcatga gtcactgga gactatttc ttctctga cggcgggggg ccalgggga tcaattgga gtccctggcc atactggga tgggtgac aattctga ctctagat ttctctct calgggaaag atccaagact gcagccagtg gaatgctc cccacagc tctctct cctgaggtc cggggctct tgggactgc ttggcttc atcagcagc tcaatcaaa aactggccc gtagctact ttctttgg gttctctt gttctctt tctagct cttagctat gcttcaatc gcttcaatc gggtgggg ttgtctct tctctggac gacaattctg tgcattgca ttgttgca ttgttgca atcattatg ccaatgagta tgggtctc atcagacca gaggatgat gttgtgaa atgacacct ggcagctcaa tgggtgactt gttgtactc tgggtatgt cctctctg atggcctca cactctgt ctccaaagcc acctctgt gcccgtgga gacatgggag cagcatggga ggctcatt taaactgt ctctctca tcaatctg ggggtgggg atctcagc tctgagagg caaccccgag ttccagcgac agccacagtg ggcagacccg gttctctga ttgtctgt cacaacgca tgggtttcc tgggtctga cactgtct gagctctga ttctacag atcgtgtaga caggagtgcc cttaaggg caatggcgc cccgtcag cclaccaaa cagcttcaa gttgagaaac aggggtctc caggccga gacagtgat gattgagga ggtatgagca ttaattcat atgggtactc cactgagccg cagactgtg atccacaca agaggtttc atccacagg ctacaaagg cccccagcaa</p>	P	Homo sapiens
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619 190743 G Protein-
Coupled Receptor
GPCR5D

NP_061124.1

gaigcaggag gagataaa

MYKDCIESTG DYFLLCDAE PWGIIIESLA ILGIVVTILL LLAFLFLMRK
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QHGRLLFTV LFSIIIWVW ISMLLRGNPQ FQRQPQWDDP VVCIALVTNA
WVFLLLYIVP ELCILYRSCR QECPLQGNAC PVTAYQHSFQ VENQELSRAR
DSDGAEEDVA LTSYGTPIQP QTVDPTEQECF IPQAKLSPQQ DAGGV

P Homo
sapiens

620 190744 G Protein-
Coupled Receptor
GPCR5C

NM_018653

cgggcaggig ggggaacitcc cigaagagig ccttgggtac agcaccttg aagacagcca ttggccatgg ggaaccaaac
agaagcctggc cgggagcca ggaaggccat ccacaagcc ttggigatgt gcciggagct ggcctcttc cgttccag
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MGTPQEPGLG ARMAIHKALV MCLGLPLFL PGAWAQGHVP PGCSQGLNPL
YYNLCDRSGA WGIVLEAVAG AGVITFTVLT IILVASLPFV QDTKKRSLG
TQVFLLGTL GLFCLVFACV VKPDFSTCAS RRFLFGVLFA ICFSLAAHV
FALNFLARKN HGPRGWVIFT VALLTLVEV INTEWLIIT LVRGSGEGGP
QGNSSAGWAV ASPCAVANMD FVMALIVML LLLGAFLGAW PALCGRYKRW
RKHGVFVLLT TATSVAIWVW WIVMYTYGM QHNSPTWDDP TLAIALAANA
WAFVLFYVP EVSQVTKSSP EQSYQGDMPY TRGVGYETIL KEQKGQSMFV
ENKAFSMDPE VAAKRPVSPY SGYNGQLLTS VYQPTMALM HKVPSEGAYD
IILPRATANS QVMGSANSTL RAEDMYSAQS HQAATPPKDG KNSQVFRNPY VWD

A Homo
sapiens

621 190744 G Protein-
Coupled Receptor
GPCR5C

NP_061123.2

P Homo
sapiens

622	190745	G Protein- Coupled Receptor LGR7	NM_021634		A	Homo sapiens
				<p>atgacatcgt gttctgtt cttacatc ttaatttg gaaatatt ttctatgg ggtggacagg atgrcaagtg ctccctggc latttccct gttgggaacat cacaagtc ttgctcagc tctgcactg taacgggtg gacgactcg ggaatcaggc cgatgaggac aactgtggag acaacaatgg atggtccatg caattgaca aataattgc cagtactac aaatgact cccaatacc ttgtgggca gaaacacctg aatgtttgtt cggttctg cagtgcaat gtcitggca aggtctggag ctgacttg atgaaacca ttacgagct gttccatgg ttcttcaaa ttgactgca atgacact agtggactt aataagaaag ctctctctg atgtctcaa gaattatcat gacttcaga agctgaacc ctccctgag cgggtgtt ttgaagatc tcaagacta gaatggctga atagccttac taaactgat ccagtcata acagaatac ctccctgag ccaagctt ttacttct agtctgag aataacgtcc taattgaaga taatcaccic agtgaattt cccaccaac attttatg ctacttct ttacttct agtctgag aataacgtcc tcaccgtt accgtataaa cctctctg acacatgcc aagactatc tggctggacc ttgaaggcaa ccaatccat aatttaagaa atttgactt tattctctc agtaattaa ctgtttagt gttgggaaa acaaaaata atcactaaa tgaataact ttgaccctc tccagaaact ggtgaattg gatttaggaa gtaataagat tgaatactt ccaccgtta tattcaagg cctgaaggag ctgtcaaat tgaatcttc ctataatca atccagaaa ttcaagcaa ccaattgat tacttgc aactcaagtc tctcagcta gaaaggatg aaatttcaaa tatccaaca aggatgtta gaccttat gaactctc cacatatatt tgaagaaatt ccagtactt gggatgcac cacatgttc cagctgaaa ccaacacgt atggaaatt atctctgag aatctctgg caagctatc tcaagagatg ttgtctggg ttgatctgc agtctgca ttgtgaaa ttgttcat ttgactgca cttatata ggtctgagaa caagcttat gccatgcaa tcattctc ctgtctgc gactgcaa ttggaatata ttactgtg atcgaggtc ttgacciaaa gttctgga gaatacaata agcatgcga gctgtggag gaggtact atgtcact tgaagctt ttgacciaaa gttctgga gaatacaata cattctgac atgggaaa taccatgca ttgtctacc tttagatg gtaggactg gaaatgcag acaattaca gttctgact tcattgat tactgttt atagtggtt tcatcact gagaalag gaatttca gttgcaatt ttctgttat taattggcc gcaatttca tcccttca ttcaagaat acagaagta ttggagcca gatttattca gttgcaatt ttctgttat taattggcc gcaatttca tcaatgtt ttctatgga agcatgtt atagttca tcaaggtcc atcaagcaa ctgaatagc gaaatgcag acaattaca gttctgact tgatctgc caacgttt ttctatag tattactga ttacttga tgcatac ttgatalcca ttgttatg gaaattct tcatgtctc aggtagaat accaggtacc ataacctt ggttagtg ttacttgc ttacttgc ttacttgc ttacttgc ttacttgc ccacaagc atttaagaa atgaltalc ggtttgga taactacaga caaagaaa ctatggacag caaaggtcag aaaacatag ctccatcatt catctgggtg gaaatgtgc cactgcagga gatgccact gattatga agcggacct ttcacatc cctgtgaa tgcactgat ttctaatca acgagacta attctatc atga MTSGSVFFYI LFGKYFSHG GQDVKCSLG YFPCGNITKC LPQLLHCNGV DDCGNQADED NCGDNNGWSM QFDKYFASY KMTSQYPFEA ETPECLVGSV PVQCLCQGLE LDCDETNLRA VPSVSSNVT MSLQWNLRK LPPDFCKNYH DLQKLYLQNN KITSISYAF RGLNSLTKLY LSHNRITFLK PGVFEDLHRL EWLIEDNHL SRISPTFYG LNSLIL VLM NNVLTRLPDK PLCQHPRLH WLDLEGNHH NLRLNLTISC SNLTVL VMRK NKNHLNENT FAPLQKDEL DLGSKNIENL PPLIFKDLKE LSQLNSYNP IQKIQAQNFQ YL VKLKSLSL EGIEISNIQQ RMFRPLMNL HIYFKKFQYC GYAPHVRSC PNITDGISSLE NLLASIIQV FVWVSA VTC FGNIFVICMR PYTSENKLY AMSISLCCA DCLMGYLVFV IGGFDLKFRG EYNKHAQL WM ESTHQL VGS LAILSTEVSV LLLTFLTLEK YICIVYPRC VRPGKCRIT VLIWITGF IVAFPLSNK EFFKNYYGTN GVCFFLHSED TESIGAQIYS VAIFLGINLA AFIIIVFSYG SMFYSVHQSA ITATEIRNQV KKEMILAKRF FFIVFTDALC WPIFVVKFL SLLQVEIPGT ITSWWVIFIL PINSALNPIL YLTLTRPFKE MIHFRWYNYR QRKSMDSKGQ KTYAPSWI WV EMWPLQEMPP ELMKPDIFTY PCMSLSISQS TRLNSYS</p>		
623	190745	G Protein- Coupled Receptor LGR7	NP_067647.1		P	Homo sapiens

624	190748	GPCR Ls190748	AX1147756		A	Homo sapiens	<p>gtctggggggg gggggagagct ggggacagggg tcaatggct gaagcaagtg cttcalccc cctagctcct gctgcatag ttggggctcc agagtggggga ggaagaaggc acttggaaac ttcttgccc ttacgtctt agccalcaa cttgagctg gagatagtg cgtatggaca ggaacttcc ctgggctctt ctgggocaca attcctggc gagaagaaga ggaaggaa gggtgaagacc ttctcact ctggggccat gtggtagagc tggagtcaga cctctctg ccaataggca tagatagtg gggtgagcag ggaattggcc agccgagca ggcacagcga cgtttcagc actggtgaga ggtgacac cttggcaggcc acctggcaca tggcagtgat aagggaagggg gtccaggata gggcaaggct cccaatggcaga acagacacag tacgggagagc tttgaagtcg ctgggagtc gttggggatcg ataacctca gccaatggc ctggcatgtc catcttcga atctgctggc tggcatggga gggcaatctg agcatgtcg agtagaaga gacaagaagg agcatggctg ggaagaaggcc aacgcagagag agggtcagca cgaatggagg gtagaalaca gcaagaaggc tgcactggcc ttgtaggca gttctggga acatggggat tccgagtggg aggaagccaa tgaagtaga cactaacac agccgggcaa tgcaggcccc ggcacagaa ccaatcaga tttcaagta ggcgaagggg tgcctggag caaggtaact gtcaagggtg atcagcagca cgttgaaggac agaggcagct ggggagggaag tgaacaatgc catccgagg ctggcagagg tctctgtg gggccggaga gggctggaga gcttggctgt gagtaggcca gtagtgcca cacaatcaa ggtgtcagcc acagccagat tcaagggtga gcaagagctg acaccalca tctgtgat caacagcag acagccacag ccactagt gtagtagca atgtagagg aggcaggag acgaaggatc actcaaatg agaaagatga ttcaatgt cgaatggga ggaactact taccagggca tg MESSFSFGVI LAVLASLIJA TNLVAVAVL LIHKNDGVS LCFTLNLAVA DTLIGVAISG LLTDQLSSPS RPTQKTLCSL RMAFVTSSAA ASVLTVMILT FDRLAIKQP FRYLKIMSGF VAGACIAGLW LVSYLIGFLP LGPMFQQTA YKGCQSFFAV FHPHFVLTLS CVGFFPAMLL FVFFYCDMLK IASMSQQIR KMEHAGAMAG GYRSPRTSD FKALRTVSVL IGSFALSWTP FLITGIVQVA CQECHLYLV L ERYLWLLGVG NSLLNPLIYA YWQKEVRLQL YHMALGVKKV LTSFLLLSA RNCGPERP RE SSSHIVTISS SEFDG</p>
625	190748	GPCR Ls190748	CAC39548.1		P	Homo sapiens	<p>atgggcaact ccaagggt gaacgctca gaagtcgag gctogtggg gttgatctg gacgtgtg tggagggtggg ggcactgtg ggaacggcg cgtgtgtgt cgtgtgtgt cgtgtgtgt cgtgtgtgt cgtgtgtgt cgtgtgtgt tgtgtgtgt ggaactgtgt ggcggcggt ccatatggt gctggggctg ctggcgccac cgcggccgc gctggggcgc gtggccttg gcccggcgt atggcgccg gctgtgtgt tctgtgtgt tctgtgtgt gctgtgtgt gctgtgtgt cgcacttg cttggcagct accgctcat cgtgacccg ctggcgccag gctgtgtgt ggcggcggt cttgtgtgt ccggcgtgt gggcgcgcg ggaactgtgt ggcgtgtgt cgtgtgtgt cgtgtgtgt cgtgtgtgt cgtgtgtgt cgtgtgtgt tctgtgtgt gggcgcggt ccttcggc cgtgtgtgt cgtgtgtgt cgtgtgtgt cgtgtgtgt gctgtgtgt ggcactgtgt gcatctgt ggtgtgtgt ggcgtgtgt ggcgtgtgt ggcgtgtgt ggcgtgtgt gactgtgt ggcactgt ggcactgt ggcactgt ggcactgt ggcactgt ggcactgt ggcactgt ggcactgt ctggcgccag cgtgtgtgt ggcactgt ggcactgt ggcactgt ggcactgt ggcactgt ggcactgt ggcactgt ggcgcgga ggcgaagcgt cgtgtgtgt ggcactgt ggcactgt ggcactgt ggcactgt ggcactgt ggcactgt agcgcggt ggcgtgtgt cgtgtgtgt ggcactgt ggcactgt ggcactgt ggcactgt ggcactgt ggcactgt tggcgcggt ggcactgt ggcactgt ggcactgt ggcactgt ggcactgt ggcactgt ggcactgt ggcactgt gaccccgag ttggcagag ggcggcggt ggcactgt ggcactgt ggcactgt ggcactgt ggcactgt ggcactgt MANSTGLNAS EVAGSLGLIL AAVEVVGALL GNGALLVVVL RTPGLRDALY LAHLCVVDLL AAASIMPLGL LAAPPPGLR VRLGPAPCRA ARFLSAALLP ACTLGVAAALG LARYLIVHP LRPGSRPPPV LVLTAVWAAA GLLGALLSLLG PPPAPPAPA RCSVLAGGLG PFRPLWALLA FALPALLLLG AYGGFVVAR</p>
626	190749	G Protein-Coupled Receptor GPR62	AF317653		A	Homo sapiens	
627	190749	G Protein-Coupled Receptor GPR62	AAK12638.1		P	Homo sapiens	

629	190774	Histamine H4 Receptor	NP_067637.2	<p>acatttatt agtttggtta tttttttcc ttttaaaaca ttttttttg agatgggggt ctgtctctgt tgcaccagca ggagtgaggt ggcagtcct cagctcagc cagcccgag tgcctaggct ccagcaatct tcttactga gccctcagag tagctgggac cgaggagact tgcaccagc cccacacaaa aatttttaa atgttgctt tcttgaagt gtctctgtcc tgtctttgtc acaaaattc atttttca tagttaatt catctctcg gtaagattt atgttggtt cttttatac ttgcagtc ttaccaggt ttgtgattt calgtttct agaaactta aactttaac ttaacaactt aaatacaag tcttttaagt acatgagtc ttgaaatgt acataatgt tataatact tatgccttac attaagttc aataagaaa atacaatgt aacatcaat aataattta aaaaatgg agataaactc tcaataatgc aaaaaataaa aaaaaataaa</p>	P	Homo sapiens
630	190823	Formyl Peptide Receptor 1 (FPR1)	NM_002029	<p>MPDTNSTINL SLSTRVTALF FMSLVAFAIM LGNALVILAF VVDKNLRHRS SYFFLNLAIS DFFVGVISIP LYPHILFEW DFGKEICVFW LTIDYLLCTA SVYNIVLISY DRYLSVSNV SYRTQHTGVL KIVTLMVAVV VLAFLVNGPM ILVSESWKDE GSECEPGFFS EWWYLAITSF LEFVIPVLV AYFNMTYWS LWKRDHLSRC QSHPGTLAVS SNICGHSFRG RLSSRRSLA STEVPASFHS ERQRRKSSLM FSSRTKMNSN TIASKMGFS QSDSVALHQR EHVELLRARR LAKSLAILLG VFVWCWAPYS LFTIVLSFYS SATPKSVWY RIAFWLQWEN SFVNPLLYPL CHKRFQKAFI KIFICKQPL PSQHSRSVSS</p>	A	Homo sapiens
631	190823	Formyl Peptide Receptor 1 (FPR1)	NP_002020.1	<p>ccagagacta gaactacca gagcaagacc acagctggg aacagtccag gagcagacaa galggagaca aattctctc tccacagaa calctcga gggacacctg cigatctgc tggctatctc tcttggata tcatcactta tctgtratt gcagtcacct ttgtctcgg ggtctggg aacgggctg tgaicgggtt ggcctggatc cggatgac acacagtcac caccatcgt taactgaac tggcgtggc tgaactctgt ttacctcca ctttgcat cttatgtt cggagatgic ttcttgatg cctcatgic ttggaccgc ggctgttcc tggcaatt cgttttacc atagtgaca tcaactgtt cgaagatgic ttcttgatg cctcatgic ttggaccgc tgggttgg tcttgcac agtctgacc cagaaccacc gcacgtgag cctggcgaag aaggtgatca ttgggacctg ggatgggt cgtctcca calggcgt tatcctgt gtgactacg taactggua aacgggggaca gtatgctgca cttttact ttgcacctg accaagacc cttaaagag galaaatgt ggcctggcca tttgacgtt gagaggatc atccgggtca tcatggct cagcgacc atgtcatg ttgtctgag ttatgggtt attgaccaca agatccaca gcaaggctg ataaagcca gtctcctt accggctc tctttgtg cagcagcct tttctgtc tggctccat atcaggtgtt ggccttata gccacagta gaatccgtga gttatgcaa ggcagtaaa aagaatgg tatgctgag gatgtgaca gtgacctggc cttctcaac agctgctca acccatgt ctatgctc atggggcagg acttccgga gaggctgac cagccctc ccgccagt ggagaggcc ctagccagg actcaacca aaccagtag acagtaaca atttactt acccttgcga gaggtgaggt tacaggcaa gtagaggagg agctggggga cacttccag ctccagctc cagctgtc tcaactgag ttaggctgag cacaggcat tctgtat ttaggata cccactcat agaaaaaaa aaaaagct ttgtgtccc ttgttgggg agaataaca gatatgatt t</p>	P	Homo sapiens
632	190824	Formyl Peptide Receptor-like 2	NM_002030	<p>METNSSLPTN ISGTPAVSA GYLFLDIITY LVFAVTFVLG VLGNGLVWV AGFRMTHVT TISYLNLA VA DFCFTSTLP FMVRKAMGGH WPFGWFLCKF VFTVDINLF GSVFLALIA LDRCVCVLHP VWTQNHRTVS LAKKVIIPW VMALLTLVP IIRVTVPGK TGTVACTFN SPWTNDPKER INVAVAMLT RGIIRFIIF SAPMSIVAS YGLIATKHK QGLIKSRNPL RVLSFVAAAF FLCWSPYQV ALIA TVRURE LLQGMKEIG IAVDVTSALA FENSCLNPM YVFMGQDFRE RLIHALPASL ERALTEDSTQ TSDTATNSTL PSAEVELQAK</p>	A	Homo sapiens

(FPRL2)

633

190824

Formyl Peptide
Receptor-like 2
(FPRL2)

NP_002021.2

P
Homo
sapiens

cacagtgcaac accatctgtt acctgaacct ggccctagct gactctctt tcatggtccat cctaccattc cgaatggctt cagtcgocat
gagagaaaa tggccttttg cgttactct atgtaagtta gttcatgta tgaagacat caacctgtt gtcagtgtct acctgaltac
catcattgt caggacgtt gatttggct cctgcatoca gcc'ggggcc agaacacatg cacatgagt c'ggccaaga
gggtgagac gggtacitgg atttaccac tagtcttacc ctacaaat tcatctct ggactataat aagtactag aalgggggaca
calactgtat tttaactt gcatctggg gtagacatgc tgaagagagg tgaacgtgt tattacat ggccaagggtc ttctgtatcc
tccacttcat tatggcttc acgtggccta tgcactcat cacagctgc taggggatac tgc'ggccaa aattcacaga aaccacatga
ttaatccag cgttcccta cgtgtcttg cgtgtgggt ggtcttctt tcatctgt ggtcccta tgaactaat ggcattctaa
tggcagctg gctcaagag atgtgttaa atggcaata caaatcatt ctgtctctga ttaaccaac aagtccttg gccctttta
acagtgcct caaccaat cctacgtct ttatgggtg taactocaa gaaagactga ttgccttt gccactagt ttggagaggg
ccctgactga ggtccctgac ttagccaga ccaggcaaac acacaccat tctgttacc tctgtgga gacggagta
caagcaatgt ga

METNFSIPLN ETEEVLPEPA GHTVLWIFSL LVHGVTFVFG VLGNGLVIVW
AGFRMTRTVN TICVLNLA DFSFSAILPF RMVSVAMREK WPFASFCLKL
VHVMIDINLF VSVYLITIA LDRICVLHP AWAQNHRMTS LAKRVMGTGLW
IFTIVLTLPN FIFWTTIST NGDYTCIFNF AFWGDTAVER LNVFITMAKV FLHLFIIGF
TVPMSIITVC YGIIAAKIHNR NHMKSSRPL RVFAAVVASF FICWFPYELI GILMAVWLKE
MLLNGKYKII LVLINPTSSL AFFNSCLNPI LYVFMGRNFQ ERLIRSLPTS LERALTVPD
SAQTSNTHTT SASPPEETEL QAM

634

190948

EMR2 Hormone
Receptor

NM_013447

A
Homo
sapiens

cggagagagg acagccctg cccactcat ctctccctg cgtctctgc cggcagctca gctgggaacca tggggaggccg
cgtcttct cgttctctg cacttctgt cgggtgact cggcggggag ctgaaaccca ggaactcagg ggtctgtgccc
gg'tgg'tccc taggactoc tctgtgtga atgccaccg cgtctgctgc aatccagggt tcaactctt tcttgatc
atcaccacc ccatggagac ttgtgacgac atcaacgagt g'tggcaact g'tcgaaagt tcatgggaa aattctggga
cgtctgggaac acagagggga gctacgact cgtgtgcagc ccagggtatg agcctgttct tgggggcaaaa acattcaaga
atgagagcga gaaacag'tgt caagatgtgg acgaatgta gcaagaacca agcctctgta aagctacagg cactgtcgtc
aacacctg gcaactacac g'tgocag'tgc cgtcctggct tcaagctcaa acctgaggac ccgaagctct gcaagatgt
gaa'tgaatgc acctccggac aaacccatg ccacagctcc accactgoc tcaacaact gggcagctat cagtgtccgt
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t'gtccg'tg caccac'tg agcag'ttgg c'gtctc'tat gggccactac g'at'gt'cag'g agggag'atcc c'gt'gt'g'act
g'tcatcact acatgggggt g'agc'gtctct c'tgt'gt'g'ccc t'ctct'g'g'c gggccctact t'tctct'gt g'aaagccat ccaagaaac

635	190948	EMR2 Hormone Receptor	NP_038475.1	<p>agcaccitcac tgcctcgcgc gctcctctcc tggccctctcc cctctctctc gttggcaattg atcaaacccg acacaaggcg cttgtctcca tcatcgccgg taacttgccac tatcttacc tggccacctt cactctggatg cttgtggagg ccctgtacct cttctctact gcacgggaacc tgcagggtgggt caacttacta agcatcaaca gattcatgaa gaagctcatg ttcccttgg gctacggaggt cccagctcgc acagtgggcca ttctggcgc cttcaggctt cactttatg gaacacctc ccgctcgtgg cttcaaccag aaaaagggaat talatggggc ttcttggag cttcttgggc cactctctt gttgaatttag ttctttct gttgactctc tggatttga aaaaacagact cttctctcc aatagtgaag tttccacctt cgggaacaca aggaatgctgg cattlaaagc gacagctcag cttgtcatcc tgggctgcac gttgtgtctg ggtcatttgc aggttgggtcc ggttggccgg gtcatggctt acctttcac catcatcac agcctgcagg gttgtctcat cttctgttg tacttggctcc ttagccagca ggtccgggag caatatggga aatgttccaa agggatcatagg aaattgaana ctgagcttga gtagcacaca cttccagca gttctaaggc tgcacctcc aaaccagca cgtttaaata gaaaatctt ctgaataaga tcttctctt ttgcccgtgg aaaatctgaa caatcttga gccatctaga ggggaaagaa aagactttgt tctgtgtgt tcaagaaatt caccatgtca gcaatatgaa ggatgttatg gaaggcgtgc ttggcatca attctgcag aaaccggaaa tcttccatgc cctgcaatgt gctcatcaaa cttccagcat atggacggcc agctgtggcc calatcttg tcaacttgaa gcacaaatatt tatgaagctia tagaagctta agactcttt cacaagctct cttctctaca aagactcttc caatcttaa aatgaagcag gaaaacaagc ctaagaggac ttcataccg acaacatcgc aaaggactag aatgttaca ccacgactc gattcttaa tttttgtt ttgtttgt ttgtcttag ttctacgggt ttgatttatt agcatctga azaatatiga ttactcac atagatcaag agagacacgg cttctgctt catggagctt ttgggggaaa atgaaggggc tcttgcagct agagttagt cagaagccga aattctaga aatcaggtt ctactgttag gcaattgaag tataaactat ttaaaca cttctctt tcatctcac</p> <p>MGGRVFLVFL AFCVWLTLPG AETQDSRGCA RWCPODSSCV NATACRCNPG FSSFSEIITT PMETCDDINE CATLSKVSCG KFSDCWNTG SYDCVCSPGY EPVSGAKTFK NESENTCDV DECQQNRLC KSYGTCTVNTL GSYTCQCLPG FKLKPEDPKL CTDVNECTSG QNPCHSSTHC LNNVGSYQCR CRPGWQPPG SPNGPNNTVC EDVDECSSGQ HQCDSTVCF NTVGSYSRCR RPGWKPRHGI PNNQKDTVCE DMTFSTWTPP PGVHSQTLR FFDKVDLGR DYKPGLANNT IQSILQALDE LLEAPGDLET LPRLQQHCVA SHLLDGLDV LRGLSKNLSN GILLNFSYPAG TELSLEVQKQ VDRSVTLRQN QAVMQLDWNQ AQKSGDPPGS VVGLVSIIPGM GKLLAEAPLV LEPEKQMLLH ETHQGLLQDG SPILLSDVIS AFLSNNDTQN LSSPVTFIS HRSVIPRQKV LCVFWEHGQN CGHWAATTGC STIGTRDTST ICRCHLSSF AVLMAHYDVQ EEDPVLTVIT YMGLSVSLLC LLLAALTFLL CKAIQNTSTS LHLQLSLCLF LAHLLFLVAI DQTGHKVLCS IIAGTLHYLY LATFTWMLLE ALYLFLTARN LTVVNYSSIN RFMKKLMFPV GYGVPAVTVA ISAAARPHLY GTPSRCWLQPEKGFIWGLG PVCAIFSUNL VLFLVTLWIL KNRLSSLNSE VSTLRNTRML AFKATAQLFI LGCTWCLGIL QVGPAAARVMA YLFTIINSLQ GVFIFLVYCL LSQVREQYQ KWSKGIRKLLK TESEMHTLSS SAKADTSKPS TVN</p>	P	Homo sapiens
636	190955	Leukotriene B4 Receptor BLT1	NM_000752	<p>gccattctt cacatccgt ggggtcagga agccctctt gaacttgac ttacgtttt gctgcgggtt ctgcccatt ttittataic cttgcagagc tgcgaggica tcttgcctt ggtttcttc caagcagaac aagtgggggc tctggaaaagg ttaaggagcc tcagtggcca ccatatact ttgcattct cctgcagaagt gagaatgaa agggaaagcag gaaggcccat ggtcagattg aagggaaggac tttttattt tttttttt ttgtgaaat ggaagctcgc tctgtcaltt aggcctggagt gcaagtggtc gatctcagct cactgcagcc tccacttctt ggggtcacat gattctctct cctcagccic ccaagtagct gagactacag gcaatgcca</p>	A	Homo sapiens

clacaccag ctaactttg taittttgi agagacgggg ttacacag ttggccaggc tggctcaaa ctgctaacat caagtgtatc
 gctccctca gctcccaaa gctcgggat taccggatg aaccaccaca accctccagg aatttttgi tttagctt tgcaggagac
 ttcaaggaaa gtagacatc cctgtccag gaacgggta aggggaacct ttctgcatg cgggttccc ctttggcag
 ggttggcag aggcaltact gttctgtc cctactct gctcactg tctcactg cagctcggcc tcaactttgt gttctaaag
 tggaaatgaa tagtagctg gagaagatag gaagagagta gttccaatc cttggccag atcaatac capactcagc
 agggtaacca catgggcaag cacaaggtag gttctgggg aagggggag taattggcat tctgtgtat accaaggaga
 ccatttggat ttggctct accaagaga atggagaatt ggttgaacta aatggaaacca gttcccttaa gtaaggggag
 gaagggggt gctggaagat gggctcttc ccaccacta gatcatagt tgaactgaag ocaaggacag agtgcgtccc
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 agatccagg alaggctaca ccaactgoc ctgaacctgg gattggcat agcttcaac cagtctctg caagcttgt
 aagcttccc gacggcatg aacatacat cttctgacg accocctca ctagggtag agttatct tctgtggct atcatctg
 tgcagtggc gctggctg gggcttccc gcaacagcti tgggtgtgg agtatctga aaaggatgca gaaggctct
 gtcactgccc tgaagtgt gaaactggcc ctggccgacc tggccgtatt tctactgt ccttttcc ttacttct gggccaggc
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 gcagccggc caccggcg ctgggtgtg tcatctct gacttggc gcttggc tgccttaca cgttgaac
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 cggccggcgt gggcttctg gccagctg tggaggggc ggttctcag ggttccagca cgtccggc gggcagctg
 ggcagaccg ctaggagcgg cccggccgt ctggagcccg gcttccga gtagctact gctccagcc ctctaat
 aaacgaactg aactggct ggttggaaagg ggcgcacti cctctggca gaatgtagc tcttagccag ttactact
 gtagggagc caggggctg gtagggctg agggctggc agcgtgggag gctggggag agtggaaaga
 gtagggaga tggagcaag tggggcga gtagggcgt gctcagct ggttccaca ggcacttta accattaaa
 ctgaagtctg aa

637	190955	Leukotriene B4 Receptor BLT1	NP_000743.1	MNTTSSAAPP SLGVEFISLL AIULLSVAL VGLPGNSFVV WSILKRMQKR SVTALMVLNL ALADLAVLT APFFLHFLAQ GTWSFGLAG RLCHYVCGVS MYASVLLITA MSLDRSLAVA RPFVSQKLRT KAMARRVLG IWVLSFLAT PVLAYRTVVP WKTNMSLCFP RYPSEGHRAF HLIFEAVTGF LLPFLAVVAS YSDIGRRLLQA RFRRSRRRTG RL VVLJLITF AAFWLPHYVV NLAEAGRALA GQAAGLGLVG KRLSLARNVL IALAFSSV NPVLACAGG GLRSAGVGF VAKLLEGTGS EASSTRRGGSLGQTARSGPA ALEPGPSEL TASSPLKLINE LN atgatgacct ttggccaa taaataat atttctgtg tgaataacaa ctggtaaat gatgtccgtg cttccctgta cagttaatg	P	Homo sapiens
638	191039	Trace Amine	AF380185.		A	Homo

Receptor 1 (TA1)

sapiens

Trace Amine
Receptor 1 (TA1)

Homo
sapiens

P

gfgtclataa ttctgaccac acicgtggc aatcigatag ttatlgttc tatatcacac ttcaaacac ttatacccc aacaaatgg
ctattcatt ccatggccac tgggactt ctctggggg gtcgtgcat gctttagat atggtagat ctgctgagca cigtgtgat
ttggagaag tcttctgtaa aatcacaca agcaccgaca ttatgctgag ctacgctcc atttccatt tgttctcat ctccatgac
cgctactag cigtgtgga tccactgaga talaagcca agatggaat ctgggtuatt tgggtgtaga tcttcatag ttggagtgic
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acttgaac tacaattat ccaatgtt atgacttt ctatcttgg tttagaag cacttgaagat gatgctgtt ggtataatt
tccaaaaa gataccagg tgaattat ttggaatt gatttcatg

639

640

G Protein-
Coupled Receptor
88 (GPR88)

Homo
sapiens

A

MMPFCHNIIN ISCKNNWSN DVRAISLYSLM VLIL.TTLVG NLIVISISH
FKQLHTPTNW LHSMATVDF LLGLVMPYS MVRSAEHCWY FGEVFKIHT
STDMLSSAS IFHLSFISID RYVA VCDPLR YKAKMNILVI CVMFISWSV PAVFAFGMIF
LELNFKGAE E IYKHHVHCRG GCSVFFSKIS GVLTFMTSFY IPGSIMLCVY
YRYLIAKEQ ARLISDANQK LQIGLEMKNG ISQSKERKAV KTLGIVMGVF
LICWCPFFIC TVMDPFLHYI IPPTLNDVLI WFGYLNSTFN PMVYAFFYPW
FRKALKMMLF GKIFQKDSRR CKLFLELSS
gggtccaca taagcacca ctctgtctc ttagcacagg gttgtctctt cttagctca gcttctgatt ttgacagcaa gctattctg
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accagtggc cgggctggcg gggcgccgg cggcttccc gggggggcag cagggggcg gggggggg cggcgggc
cgggctgctg gcttctgct tgggacagca ggcactgggg tgggtgaggg tgggagggg gcttctgct cgggtgtct
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cggaggtg cagggcgcaac tggggcaccg cggcgggggg caggaactgt taacttggg taaccggcg ggaagggaag
tcccgggtt ccgaggtct tggggcaccg cggctcttc cctctaggg calcccgcg ctgaacgaag acttccggg
cgaagggcga tagatcgggg gaaaatgggg ccttcgaccc caggggggcta ccttgaaccaa ggggtctctc taaggggg

[illegible]

643	191168	P2Y ₁₂ Platelet ADP Receptor	NP_073625.1	<p>ataggaaaa agaacaggat ggtggtagcc caaatgaaga gactccaatg taacaaat aactaaggaa atatticaat cicttigitg tcagaactcg taaagcaaa gcgctaagta aaaatataa ctagcaaga agcaactaag ttaataalaa tgaactiaaa gaaacagaag atacaaaaag caattttcat tiaccttcc agtagaana gctacttaa aatalaana actaatctaa actgtagctg tattagcagc aaaaacaaag ac</p> <p>MQAVDNL TSA PGNTSLCTRD YKIQVLFLPL LYTVLFFVGL ITNGLAMRIF FQIRSKSNFI IFLKNTVISD LLMILTFPFK ILSDAKLGTG PLRITFVCQVT SVIFYFTMYI SISFLGLITI DRYQKTTRPF KTSNPKNLLG AKILSVVIWA FMFLSLPNM ILTNRQPRDK NVKKCSFLKS EFGLVWHEIV NYICQVIFWI NFLIVVCYT LITKELYRSY VRTRGVGKVP RKKVNVKVEI IIAVFFICFV PFHFAPIPT LSQTRDVFDC TAENTLFYVK ESTLWLTSLN ACLDPFIYFF LCKSFRNSLI SMLKCPNSAT SLSQDNRKKE QDGGDPNEET PM</p>	P	Homo sapiens
644	191193	Trace Amine Receptor 3 (TA3)	AF380189	<p>atggigaata attictcca agctgaggci gtagagctgt gtacaaga cgtgaacgaa tctgcattia aaactcttia ctcgccaggt cctcgaltcia tctciacgc cgtccttggg ttggggctg tgcctggcagc gtttggaaac ttactggta tgaigtctat ccttacttc aaacaactgc acacacttac aaacttcig attgctgcg tggccigtgc tgaactctg gtaggagica ctagalgcc cttcagcaca gtaggctg tggagagcgtg ttggacttt ggggacaggt actgaaat ccalacatgt ttgacacat ccttcgtt tcttcttia ttcatlta gctglatc tgtataga tacaatgctg ttactgatc tctgacctat ccaaccaagt ttacigtgic agtticaggg atatgcattg tcttctg gttctttct gtacalaca cgttttgc cttttacacg gtagccaacg aagaagaaat tgaggaatia gtagtgcic taactgtgt agtaggctgc caggctccac tgaatcaaaa ctaggtctcia cttgtttc ttctatct lataccaat gtcgcaatgg tttttatata cagtaagata ttutttggg ccaagacatca ggtaggaag atagaaagia cagccagcca agctcagtc tctcagaga gttacaaga aagagtagca aagaagtaga gaaaggcgc caaaaacctg ggaattgcta tggcagcatt tctgtct tggtaacct acctgtga cccctgatt tatgtctt ttaccaatg gtttgggaag taigttaag agattttatg ttgtgtgt laltatati caglatga cccctgatt gtagcttata tgaattttat aaactcttc gcaataaac ttatgttag cggcaaggc ttaaggatg atctgcaac aactaatia ttcttgaag aagtagagac agatlaa MVNNFSQAE A VELCYKNVNE SCIKTPSPG PRSILYAVLG FGAVLAAGN LLVMIALHF KQLHTPTNFI IASLACADFL VGVTVMPFST VRSVESCWYF GDSYCKFHTC FDTSCFASL FHLCCISVDR YIAVTDPLTY PTKFTVS VSG ICIVLSWFFS VTYSFSIFYT GANEEGIEEL VVALTCVGGC QAPLNQNWVL LCFLLFFIPN VAMVFIYSKI FLVAKHQARK IESTASQAQS SSESYKERA KRERKAATL GIAMAAFLVS WLPYLVDVI DAYMNFITPP YVVEILVWCV YVNSAMNPLI YAFFYQWFGK AIKLIVSGKV LRTDSSTTNL FSEEVETD</p>	A	Homo sapiens
645	191193	Trace Amine Receptor 3 (TA3)	AAK71240.1	<p>atgaatgagc cactagacta ttagaacat gcttctgatt tcccagattia tgcagctgt ttgggaatt gcaatgatga aaacatccca ctcaagatgc actacctccc tttattat ggcatlact tctctgtgg atttcaggc aatgcagtag tgaatccac ttactttc aaaatgagac cttggaagag cagcaccatc attatgcta acctggctg cagatctg ctagatcga ccagctccoc cttctgatt cactactatg ccagtgccga aaactggatc ttggagatt tcatgttaa gttatccg ttacgtcc atttcaact gtatagcagc atctcttcc tcaactgtt cagcatctc cgtactgtg tgaatcica ccaatgagc tgcctttcca ttcaaaaac tcgatgca gtttagcct tgcctgtgtt gtagatcatt tcaatgttag ctagctacc gtagacttc ttagatcat caaccaacag gaccaacaga ttagccgtgc tgaactcac cagttggat gaactcaala cttaaatg gtagacttc atttgact caactactt ctgcctccc ttggtagatg tgaacttgc ctatccacg attatccca ctagtccca tggactgca actgacagt gacttagca gaaagcacga aggttaacca ttctgact ccttgactt ttactgtt tttaacct ccatatctg aggtgacatc ggatogaatc tgcctgct tcaatcaggt gttccattga gaatcagatc calgaagct acatgttct tagaccattia gctgctctga acactttgg</p>	P	Homo sapiens
646	191196	G Protein- Coupled Receptor GPR80	AF411109	<p>atgaatgagc cactagacta ttagaacat gcttctgatt tcccagattia tgcagctgt ttgggaatt gcaatgatga aaacatccca ctcaagatgc actacctccc tttattat ggcatlact tctctgtgg atttcaggc aatgcagtag tgaatccac ttactttc aaaatgagac cttggaagag cagcaccatc attatgcta acctggctg cagatctg ctagatcga ccagctccoc cttctgatt cactactatg ccagtgccga aaactggatc ttggagatt tcatgttaa gttatccg ttacgtcc atttcaact gtatagcagc atctcttcc tcaactgtt cagcatctc cgtactgtg tgaatcica ccaatgagc tgcctttcca ttcaaaaac tcgatgca gtttagcct tgcctgtgtt gtagatcatt tcaatgttag ctagctacc gtagacttc ttagatcat caaccaacag gaccaacaga ttagccgtgc tgaactcac cagttggat gaactcaala cttaaatg gtagacttc atttgact caactactt ctgcctccc ttggtagatg tgaacttgc ctatccacg attatccca ctagtccca tggactgca actgacagt gacttagca gaaagcacga aggttaacca ttctgact ccttgactt ttactgtt tttaacct ccatatctg aggtgacatc ggatogaatc tgcctgct tcaatcaggt gttccattga gaatcagatc calgaagct acatgttct tagaccattia gctgctctga acactttgg</p>	A	Homo sapiens

[illegible]

651	191222	G Protein- Coupled Receptor Ls191222	ENSP00000199 719	aaatgagga aatgacagag aaggatcaca tagcagactc ttaatccoc ggaatgattc acaacaggig tttcaggti tttgtlaaat attatgcaa caaccagaa aatatgati ccagtaggg aggaatcag gtaglagatg gccaaaggagi cattccaggti gagatatcc acttcctt caaagcacat agtgcctca acagggccc agtgagattt gttgttgcat aaaaaggcagt gagcatatc t	P	Homo sapiens
652	193511	EGF-Like Module- Containing Mucin-Like Receptor EMR3	NM_032571	QTLAMIHSIE MINNSTLLPG VKLGYEYIDT CTEVTVAMAA TLRFLSKFNC SRETVEFKCD YSSYMPRVKA VIGSGYSEIT MAVSRMLNLQ LMPQVGYEST AEILSDKIRF PSFLRTVPSD FHQIKAMAH L IQSGWNWIG IITDDDDYGR LALNTFIQA EANNVCIAFK EVLPALFSDN TIEVRINRTL KKILEAQVN VIVFLRQFH VFDFENKAIE MNINKMWIAS DNWSTATKIT TIPNVKKIGK VVGFARRRGN ISSFHSFLQN LHLLPSDSHK LLHEYAMHLS ACAYVKDIDL RLHISQLAV FALGYAIRDL CQARDCQPN AFQWELLGV LKNVTFIDGW NSFHDAHGD LNTGYDVVLW KEINGHMTVT KMAEYDLQND VFIPDQETK NEFRNLKQIQ SKCSKECSPG QMKKTTRSQH ICCYECQNCN ENHYTNQTM PHCLLNNKT HWAPVRSTMC FEKEVEYLNW NDSLAILLI LSLGIIFVL VVGIIFTRNL NTPVVKSSGG LRVCYVILL HFLNFSTSF FIGEPQDFTC KTRQTMFGVS FTLCISCLT KSKILLAFS FDPKLQKFLK CLYRPILIF TCTGIQVVIC TLWLIFAAPT VEVNVSLPRV ILECEEGSI LAFGTM LGYI AILAFICFIF AFKGYENYN EAKFITGML IYFIAWITFI PYATTFGKY VPAVEIIVIL ISNYGILYCT FIPKCYVVIC KQINTKSAF LKMIYSSSH SVSSI tttgtgagc taggaaggti ggttggccta cggcacaga gagagctcc agggctggct ggcgtggagt accogtacca cagaaalgca gggaccattg cttctccag gctctgctt tctgtcagc cttctggag cgtgactca gaaacacaa acttcctg ctaaagctcc ccaaaagt tctgtgca ataacatca ctgcactgc aacatggat atacttgg atctggggag aaactatca cattccctt ggagacatg aacgacatla algaatgac accacat agtataat tgggattaa cgttgtgtg tacaatgtc aaggaggti ctactgcaa tgtgtccag gatatagact gcatctgg aatgaacaat tcaatgaac caatgaagac accgtcagg acaccctc ctcaagaca accgagggca ggaagagct gcaaaagati gggacaaat ttgagcact tctaccaat cagacttat ggagacaga agggagagaca gaaatctat ccacagctac cactatct cgggaggtg aatcgaaggt tctagaact gcttgaag atcagaaca aaaaagctct gaaatccaa acgagaggt agctatgaa actcaagca ttacagaca tgcctgaa gaaagaaaga catcaact gaacgtccaa atgaactca tggacatccg ttgcagtac atcaccagg gagacaca aggtccagt gccattgct ttatcata ttctctt ggaaacatca taaatgaac ttttttgaa gagatggala agaaagatca agtatactg aactctcagg ttgtgagtc tgcattgga ccaaaaggga acgtgtct ctcaagcti gtagcgtga cttccagca cgtgaagatg accccagta ccaaaagggt cttctgtgic tactgggaaga gcacagggca gggcagccag tggccagg agtggctgt cctgatacac gtagaacaaga gtagacat gtagaagc agtacactt cagctcgc tctctgag gccctgacca gccctgacc cgtctcacc tgcctgagc gtagatgagc aaggtgct ggggctgagc gctctcgc tggccctc cctggcggcc ctacttct tctgtgta agccatccag aacacagca cctcagca tctcagctc tggctgag tttctgag ccactctc ttcctgagc gtagatgagc aactgaacc aaggtgct gctccatc cgcctgct tggcagca tctactgag gccctgacc cgtctcacc tggatgagc tgggggggt gacactct ctacagc ggaaacctgac agtgggtaac tactaagca tcaatagact caagaagagc tggatgagc tgggggggt gacactct ctacagc gctgtgagc tggccattc tgcagctcc tggccacc ttatggaa tgcctgagc tgcctgagc accgtgagca gggattcagc tggagttcc tggccagc cgtgagcatt tctctgagc attagatg gttatctg gttttgga ttttgaag aaaacttcc tcccaata gtagagagc aacatccag aacacagga tgcctgctt caaagcaaca gctcagct tcatctggc ctgacatgg tcttggggt tgcacaggt gggctcagc tggcctact ctacacatc	A	Homo sapiens

653	193511	EGF-Like Module- Containing Mucin-Like Receptor EMR3	NP_115960.1	<p>atcaacagcc tcaaggctt cttcatctt ttggttact gctctctcag ccagcaggct cagaaacaat atcaaaagtg gtttagag atcgtaaat caaaatcga gctgagaca tacacatt ccagcaagat gggtcttgac tcaaaacca gtgagggga tgtttcca ggacaagtga agagaaata taaaacag aatattcaac tccatattga aaatcatac catgatctc ttggcatia tgaagaatga agtaaggaa aagggaattc attaaacata tcatcttgg agaggaaatga atcaacctt acttccaaag ctgtttgic tccacaatag gcttcaaca atgtgttgg aattgcat tcttctcaaa aaaaaa MQGPLLPGL CFLSLFGAV TQKTKTSCAK CPNASCVNN THCTCNHGYT P SGSGQKLTFT PLETCNDINE CTPPYSVYCG FNAVCVNVEG SFYCQCVPGY RLHSGNEQFS NSNENTCQDT TSSKTTEGRK ELQKIVDKFE SLLTNQTLWR TEGRQEISST ATTILRDVES KVLETALKDP EQKVLKIQND SVAJETQAIT DNCSEERKTF NLNVQMNSMD IRCSDIIQGD TQGPSAIAFI SYSSLGNIIN ATTFEEMDKK DQVYLSQVV SAAIGPKRNV SLKS SVTLTF QHVKMTPTSK KVFCVYWKST GQGSQWSRDG CFLIHVNKSH TMCNCSHLSS FAVLMALTSQ EEDPVLTVIT YVGLSVLLC LLLAALTFL CKAIONTSTS LHLQSLCLF LAHLLFLVGI DRTEPKVLCs IIAGALHYLY LAFTWMLLE GVHLFTARN LTVVNYSSIN RLMKWIMFPV GYGVPATVA ISAASWPHLY GTADRCWLHL DQGFMSWFLG PVCAIFSANL VLFILVFWIL KRKLSSLNSE VSTIQNTRML AFKATAQLFI LGCTWCLGLL QVGPAAQVMA YLFTIINSLO GFFFLVYCL LSQVQKQYQ KWFREIVKSK SESETYTLSS KMGPDSPSE GDVFPQVVKR KY KHAYICLAAI WAYASFWTIM PLVGLGDYVP EPFGTSCITLD WWLAQASVGG P QVFILNLF CLLPATAV FSYVKIAKV KSSSKEVAHF DSRHSHSVL EMKLLTK VAML ICAGFLAWI PYAVSVWSA FGRPDSPIQ LSVPTLLAK SAAMYNPIY QVIDYKFACC QTGGLKATKK KSLGFRLLHT VTTVRKSSAV LEIHEEV A agcgaacct cggggcgcc ggagaccatg ttgagcgcc ggagggcgcc agcagctgc ggagatctgt ggaggggcg gaaaaacca ggcccgccag ccggagggcg tccggccgc gataatgag ggagagaggg tgcgagggga caggcgaggg ggccggggcg ccggggcgcc gcagggggcc ggagggggcg ccgagcgcc ggccagcc aaggcccgga ccggggcggg ggccggggga ggccggcgga gataatggcg agggcgcc cgtggcgggg cctcggggaa cggcgccacc ccatactct gctctctc cttcttctg tccocctcag ccaggagggag ctggggggcg gtagggacca gggtcgggg ccaggcttag ctgccatag ggggcgccag ggcatactg gtaggggagc cttagcttt tgcggagt cttccgggt ccggggagat ggggggcgcc gctgggggt caggggagct atcttctgg ggctccgagg gagaaggcaa agcccgga atagtcgag ggccctgag cagccggaatg agggagctggg gattgaacac ggctccagc catggcgag ccgcgaacga gtagacagag agggagccag gcttctgta tcttggcgcc cagagctc cttggcggg cggacaggac cttgcaag aggtatgctg taccagggg cttctctc agggggcgcc ggctcgggga acagctgcc cttccctta gactttga ttggacca cgggtccaa cgggtctct cccagcgga cgttgggaca ggctccgca aagagtggg caccggcg tcttgggg aattggcg aacaggagc aagggtcag ggagagagc cagacatcc ggagcagaa ggacagcccc ccgggggaac tgttccag ggccctcggg atctggcccc gacttggall cagcaccag caggcgaggg acagctctg catcaggtc agcaccgg gattctggga cagctccga gccggcgccc aaggcagc gctccgggg tcttccgc tccgcttc tcccgagc cccggggcg cgttccccgg gactccggc ccgtctgaa gccaggaaag taacctggc gaacgggga cgttctg gggcgccaaa ccgocaccgg cagttccgc agtaacata ccagagctg gtaggggaga atgagggagc agggcagcg gtagctagc tgggttctca ggacccggac ggcgggaggg ccggggcggt agtactcg ctggcgggcac tcaaggagc ccgctcgctg gtagctgttca gcatcgacc</p>	Homo sapiens
654	193516	G Protein-Coupled Receptor dJ402H5.1	CAC21687.1	<p>agcgaacct cggggcgcc ggagaccatg ttgagcgcc ggagggcgcc agcagctgc ggagatctgt ggaggggcg gaaaaacca ggcccgccag ccggagggcg tccggccgc gataatgag ggagagaggg tgcgagggga caggcgaggg ggccggggcg ccggggcgcc gcagggggcc ggagggggcg ccgagcgcc ggccagcc aaggcccgga ccggggcggg ggccggggga ggccggcgga gataatggcg agggcgcc cgtggcgggg cctcggggaa cggcgccacc ccatactct gctctctc cttcttctg tccocctcag ccaggagggag ctggggggcg gtagggacca gggtcgggg ccaggcttag ctgccatag ggggcgccag ggcatactg gtaggggagc cttagcttt tgcggagt cttccgggt ccggggagat ggggggcgcc gctgggggt caggggagct atcttctgg ggctccgagg gagaaggcaa agcccgga atagtcgag ggccctgag cagccggaatg agggagctggg gattgaacac ggctccagc catggcgag ccgcgaacga gtagacagag agggagccag gcttctgta tcttggcgcc cagagctc cttggcggg cggacaggac cttgcaag aggtatgctg taccagggg cttctctc agggggcgcc ggctcgggga acagctgcc cttccctta gactttga ttggacca cgggtccaa cgggtctct cccagcgga cgttgggaca ggctccgca aagagtggg caccggcg tcttgggg aattggcg aacaggagc aagggtcag ggagagagc cagacatcc ggagcagaa ggacagcccc ccgggggaac tgttccag ggccctcggg atctggcccc gacttggall cagcaccag caggcgaggg acagctctg catcaggtc agcaccgg gattctggga cagctccga gccggcgccc aaggcagc gctccgggg tcttccgc tccgcttc tcccgagc cccggggcg cgttccccgg gactccggc ccgtctgaa gccaggaaag taacctggc gaacgggga cgttctg gggcgccaaa ccgocaccgg cagttccgc agtaacata ccagagctg gtaggggaga atgagggagc agggcagcg gtagctagc tgggttctca ggacccggac ggcgggaggg ccggggcggt agtactcg ctggcgggcac tcaaggagc ccgctcgctg gtagctgttca gcatcgacc</p>	Homo sapiens
655	193524	Cadherin EGF LAG Seven-Pass G-Type Receptor 3 (CELSR3)	NM_001407	<p>agcgaacct cggggcgcc ggagaccatg ttgagcgcc ggagggcgcc agcagctgc ggagatctgt ggaggggcg gaaaaacca ggcccgccag ccggagggcg tccggccgc gataatgag ggagagaggg tgcgagggga caggcgaggg ggccggggcg ccggggcgcc gcagggggcc ggagggggcg ccgagcgcc ggccagcc aaggcccgga ccggggcggg ggccggggga ggccggcgga gataatggcg agggcgcc cgtggcgggg cctcggggaa cggcgccacc ccatactct gctctctc cttcttctg tccocctcag ccaggagggag ctggggggcg gtagggacca gggtcgggg ccaggcttag ctgccatag ggggcgccag ggcatactg gtaggggagc cttagcttt tgcggagt cttccgggt ccggggagat ggggggcgcc gctgggggt caggggagct atcttctgg ggctccgagg gagaaggcaa agcccgga atagtcgag ggccctgag cagccggaatg agggagctggg gattgaacac ggctccagc catggcgag ccgcgaacga gtagacagag agggagccag gcttctgta tcttggcgcc cagagctc cttggcggg cggacaggac cttgcaag aggtatgctg taccagggg cttctctc agggggcgcc ggctcgggga acagctgcc cttccctta gactttga ttggacca cgggtccaa cgggtctct cccagcgga cgttgggaca ggctccgca aagagtggg caccggcg tcttgggg aattggcg aacaggagc aagggtcag ggagagagc cagacatcc ggagcagaa ggacagcccc ccgggggaac tgttccag ggccctcggg atctggcccc gacttggall cagcaccag caggcgaggg acagctctg catcaggtc agcaccgg gattctggga cagctccga gccggcgccc aaggcagc gctccgggg tcttccgc tccgcttc tcccgagc cccggggcg cgttccccgg gactccggc ccgtctgaa gccaggaaag taacctggc gaacgggga cgttctg gggcgccaaa ccgocaccgg cagttccgc agtaacata ccagagctg gtaggggaga atgagggagc agggcagcg gtagctagc tgggttctca ggacccggac ggcgggaggg ccggggcggt agtactcg ctggcgggcac tcaaggagc ccgctcgctg gtagctgttca gcatcgacc</p>	Homo sapiens

[illegible]

[illegible]

656	193524	Cadherin EGF LAG Seven-Pass G-Type Receptor 3 (CELSR3)	NP_001398.1	<p>gcaaggag cagaacaag ggaattcaag accagaatg tagtgccac tgcctcctat gttiacagga tccctcgtgg ccctaggcac ctgggctgca ggaagtgact ccgttccact cctctttat tcccttaaa agggaaaaat gactgttacg accctgtca caaaactct acitgtgcta ttgtctgc tgcacgaac tgaagactt aaaaattgt tactgttac aggtccagat tcaaaaaatg tttttactt gtttacaact caaaacttg agttttacac ttgtttaca gtagataat tttttctt tttttccaag tgaaggtag ggaaggagg agaaggactt ggaaggacca cctgtgagga cctgacccig gccatcttga ggggtttctt aaocccagg tctccaggc ggaaggtag ccttgagtc cgtttacag cagatccaga agaccttgag agtaggcgtc cttaaccac ggggagagt ggcgtgagc ggcgggggg tggctgtgc agacaccc taccacca cccatgcat actctggga agcagcttc tgggagatla gaaatttact ttcctgact ggaagctaat cccaccagc aggacccaaa ctctcttac cgagaaggac cccagctctt gaagggtga gtaggctgct ggggggggga ggggtgtt actatgctt agggttcta gatgcccic tctgggttc cctctcca gccaggggc cctcttct gtcgtgtaa atgttccgt gaagccggcg tctgttgg gaataaact ctatagaaa caaaa</p> <p>MMARRPPWRG LGERSTPILL LLLSLFPLS QEELGGGGHQ GWDPLAATT GPAHIGGA LALCPSSGV REDGPGGLV REPfVGLRG RRQSARNRG PPEQNEELG IEHGVQPLGS RERETGQPG SVLYWRPEVS SCGRTGPLQR GSLSPGALSS GVPGSGNSSP LPSDFLRHH GPKPVSSQRN AGTGRKRVRG TARCCGELWA TGSKQGGERA TTSGAERTAP RRNCLPGASG SGPELD SAPR TARTAPASGS APRESRTAPE PAPKRMRSRG LFRCLPQR PGP RPPLPA RPEARVTSANRARRFRAN RHPQFPQYNY QTLVPENEA GTAVLRVVAQ DPDAGEAGRL VYSLAALMNS RSELSIDP QSGLRTAAA LDRESMERHY LRVTAQDHGS PRLSATTMVA VTVADRNDHS PVFEQAQYRE TLRENVEEGY PILQLRATDG DAPPNANLRY RFVGPAAARA AAAAFAEIDP RSLISTSGR VDREHMESEY LVVEASDQEQ EPGRSATVR VHITVLDEND NAFQSEKRY VAQVREDVRP HTVVLRTAT DRDKDANGLV HYNISGNSR GHFAIDSLTG EIQVVAPLDF EAEREYALRI RAQDAGRPL SNNTGLASIQ VVDINDHPI FVSTPFQVSV LENAPLGHVS IHQA VDADH GENARLEYSL TGVA PDTPFV INSATGWVSV SGPLDRESVE HYFFGVEARD HGSPPLSASA SVTVTVLDVN DNRPEFTMKE YHLRLNEDAA VGTSVVSVTA VDRDANSAS YQITGGNTRN RFAISTQGGV GLVTLALPLD YKQERYFKLV LTASDRALHD HCYVHINTD ANTHRPVFQS AHYSVSVNED RPMGSTIVI SASDDDDVGEN ARITYLLEDN LPQFRIDADS GAILQAPLD YEDQVYTLA ITARDNGIPQ KADITYVEVM VNDVNDNAPQ FVASHYTLV SEDAPPFTSV LQISATDRDA HANGRVQYTF QNGEDGDGDF TIEFTSGIVR TVRRLDREAV SVYELTAYAV DRGVPLRTP VSIQVMVQDV NDNAPVFPAB EFEVRVKENS IVGSVVAQIT AVDPDEGPNH HMYQIVEGN IPELFQMDIF SGELTALIDL DYEAREQYVI VVQATSAPLV SRATVHVRLV DQNDNSPVLN NFQILFNNTYV SNRSDTFPSG IIGRIPAYDP DVSDHLFYSF ERGNELQLLV VNQTSSELRL SRKLDNNRPL VASML VTVID GLHSVTAQCV LRVVIITEEL LANSLTVRLE NMWQERFLSP LLGRFLEGVA AVLATPAEDV FIFNIQNDTD VGGTVLNVSF SALAPRGAGA GAAGPWFSSE ELQEQLYVRR AALAARSLLD VLPFDDNVCL REPCENYMKC VSVLRFDDSA PFLASATLFL RPIQPIAGLR CRCPPGFTGD FCETELDLCY SNPCRNGGAC ARREGGYTCV</p>	P	Homo sapiens
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ILSWNFGSD MAVSPWYLG LAFRTRATQG VLMQVQAGPH
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DPLPSRP LDSLRSNS REQDDQVPSR HPSREALGPL QLLRAREDS
LDLSSIL ASFNSSALSS VQSSSTPLGP HTTATPSATA SVLGPSTPRS
EVRSEG HS
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t cctactaca gcaccctcc cctgtggcgg ccatgtcat tgggtctat ggcgtcat tctgtctg
tgg tctgttcat cgtgtcaag aaccggcaca tgcatactgt caccacatg ttactctca

Homo
sapiens

A

658 193914 Neuropeptide FF NP_071429.1
1 Receptor

P Homo
sapiens

accctggctgt cagtggacctg ctgggtgggca tctctgcat gccaccacc ctgtgggaca accatcatc tgggtggccc
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YSCWEAWPEK GMRRVYTTVL FSHYLAFLA LIVVMYARJA RKLCAQAPGA
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LRNGRVAHHG LPREGPGCSH LPLTIPAWDI

659 194319 G Protein- NM_025048
Coupled Receptor
FLJ22684

A Homo
sapiens

agatctgat actttctt caaacagcat aagaagtgat tgaagccaca gtaactgaa ggaagggtc cctcgagtgt
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[illegible]

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665	194745	G Protein-Coupled Receptor SLT/MCH2	Homo sapiens	<p>NM_032503</p>

Homo
sapiens

P

NP_115892.1
G Protein-
Coupled Receptor
SLT/MCH2

194745

666

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Homo
sapiens

A

NM_032554
Chemokine
Receptor
FKSG80/GPR81

194756

667

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LLENHLCVQE TAVSCSFIM ESANGWHDIM FQLEFFMPLG IILFCSFKIV
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Homo
sapiens

P

NP_115943.1
Chemokine
Receptor
FKSG80/GPR81

194756

668

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671	194858	G Protein- Coupled Receptor LS194858	LG94710	QGLFIFLHC LLNSEVRAAF KHKTKVWSLT SSSARTSNAK PFHSDLMNGT RPGMASTKLS PWDKSSSHSAH RVDLSAV tiagttaag tccaggtcga cactgttgg gctgttggg tggtaggcaa tgcaggggcc gggactgtcc cggagggtc ttcccacag cccctgcagg cactttggg cggctggccct ccaggggggt gtagggcgt gtagccacag cccatggct acgggacag cccctgcact ggcacttct agggagagga gggacaacag tgcctcagg ccagctggcg ggcctgcctc ataggccag actagagga gcatgtggc cactgtggc cccagacaca gcccgaagag cagcatggct ccagctgtg ccctgtctg cctccagga agggccggg caggccggg ggcctcagc cggcacactg cccgtccag ccggcagag tcctgcagt ggcgggggg agtggccag acgcggacag agaggagagc agcacacccc acggccgggca gcaaggccc atagacttg aggtacaggt aggggggctgg gaaagatagcc tgggaagctg agtggcacc agggggccag tggttccacc ccaggcggg cagactggga aagagcagg gaccagccca ggtgagggc agggccagcc gaaatgcc aggggggctgg agtggccca ggcctggc gtagggcc cctggacca gcaagaggt ggcagagcagg gaggaggaag agaaagtggg agccaagt agagggggc agaccagta acccggcg cctgggtcc cctgggtcc acagccctgg caatggggc aatggccagc ccgtgagcag ccagccagc agtaggctca ggaagagga gccaagcag ggcctggc ggcggcggtc ccaggcgatg ccaggggcta ggaagaggt cggcggtg atgaggctg ccaggggcagg ggaagagccc aaagccccc tgggaatggg gctggcacc tggccagtgc tggggcgt cactgtg cggggacag gggagctgg ggcggcagg cggcagc QDTRHGNRC RAGCSNSLT RKAQAGAP APNSHACRLP LQDSPVPRTK MTPNSTGEVP SPIPKGALGL SLALSLIT ANLLALGIA GTACCAATCW LLLPEPTAGW AAGSGIATL PGLWNQRRR YWSCLLYLA PNFSLSLA NLLVHGERY MAVLRPLQPP GSIRLALLT WAGPLLFASL PALGWNHWT GANCSSQAF PAPLYLEVY GLLPAPVGA AFLSVRLAT AHRQLQDICR LERA VCRDEP SALARALTWR QARAQAGAML LFGLCWGPYV ATLLSVLAY EQRPLPGPT LLLSLGS A AAVPVAMG LGDQRYTAPW RQPPKGACRG CGEPPGTVP APALPTTQAA KAVSTWT tcaggccag gataagtaa tcatgggtc caccagcag gctagtag ggggggtgt tgaatcaa tgtattcc atgttagc agaatgtg tggcagtaga gtagggcag gctcagat cagcaagaac tggattcaa acitggattg aggacccca cctttgata ggtgactat tctgtgag tctgtatc ggccttta aatgaggaag taaatccac atggcagggt gggggggaga atcagagc atacagctgg tgalcacaac tgggttgt ttccagggt accagactgg ggtttctgag catggattca accatccag tctgggtac agaaactgaca caaatcaac gacgtgagga gactctgc tacaagcaga ccctgagct cagggggctg acgtgcatg ttccctgt cggcctgaca ggaacggg tttgtctg gctctggg tggcgatg gcaagagc tgtctcat taaatcaa accctggc ggcggact cctctta ggcggccat taaatgct ccgttagcc taaataa cggccatcc atctcaaaa tctctggc ccatctgg ccatctggc cggccagat accgtgac agcggccatca gacccagc cttctgtcc atctgtgg ccatctgg ccatctgg ccatctgg ccatctgg ggctatgt gtcctgt cttgtgt cttgtgt cttgtgt cttgtgt cttgtgt cttgtgt cttgtgt tctgtgt gaaacgtc atttattc aatcgtgt cttgtgt tctgtgt tctgtgt tctgtgt tctgtgt caggattc tgggtatcc ggaagatcc gctgacagg cttgacatg caatctct caccgtgt gcttctcc tctgtgt ggcctgtg atcaggtgg cctgtttc caggatcc cttgagga aggtctat tttgtgt cactagt ccatttct gtcgtct aacagcagg ccaacccat catttct tctgtgt cttgtgt cttgtgt cttgtgt tgaagctgt tctcagag gctgtcag acagccctga ggtggagaa ggtggaggt ggttctca ggaagac gagctgt ggaagcagtt ggaagcagtt ggaagcagtt ggaagcagtt ggaagcagtt ggaagcagtt ccacctga caattatg catttct agccttct ctagaatg	A	Homo sapiens
672	194858	G Protein- Coupled Receptor LS194858	ENSP00000053 533	QDTRHGNRC RAGCSNSLT RKAQAGAP APNSHACRLP LQDSPVPRTK MTPNSTGEVP SPIPKGALGL SLALSLIT ANLLALGIA GTACCAATCW LLLPEPTAGW AAGSGIATL PGLWNQRRR YWSCLLYLA PNFSLSLA NLLVHGERY MAVLRPLQPP GSIRLALLT WAGPLLFASL PALGWNHWT GANCSSQAF PAPLYLEVY GLLPAPVGA AFLSVRLAT AHRQLQDICR LERA VCRDEP SALARALTWR QARAQAGAML LFGLCWGPYV ATLLSVLAY EQRPLPGPT LLLSLGS A AAVPVAMG LGDQRYTAPW RQPPKGACRG CGEPPGTVP APALPTTQAA KAVSTWT tcaggccag gataagtaa tcatgggtc caccagcag gctagtag ggggggtgt tgaatcaa tgtattcc atgttagc agaatgtg tggcagtaga gtagggcag gctcagat cagcaagaac tggattcaa acitggattg aggacccca cctttgata ggtgactat tctgtgag tctgtatc ggccttta aatgaggaag taaatccac atggcagggt gggggggaga atcagagc atacagctgg tgalcacaac tgggttgt ttccagggt accagactgg ggtttctgag catggattca accatccag tctgggtac agaaactgaca caaatcaac gacgtgagga gactctgc tacaagcaga ccctgagct cagggggctg acgtgcatg ttccctgt cggcctgaca ggaacggg tttgtctg gctctggg tggcgatg gcaagagc tgtctcat taaatcaa accctggc ggcggact cctctta ggcggccat taaatgct ccgttagcc taaataa cggccatcc atctcaaaa tctctggc ccatctgg ccatctgg ccatctgg agcggccatca gacccagc cttctgtcc atctgtgg ccatctgg ccatctgg ccatctgg ggctatgt gtcctgt cttgtgt cttgtgt cttgtgt cttgtgt cttgtgt cttgtgt tctgtgt gaaacgtc atttattc aatcgtgt cttgtgt tctgtgt tctgtgt tctgtgt tctgtgt caggattc tgggtatcc ggaagatcc gctgacagg cttgacatg caatctct caccgtgt gcttctcc tctgtgt ggcctgtg atcaggtgg cctgtttc caggatcc cttgagga aggtctat tttgtgt cactagt ccatttct gtcgtct aacagcagg ccaacccat catttct tctgtgt cttgtgt cttgtgt cttgtgt tgaagctgt tctcagag gctgtcag acagccctga ggtggagaa ggtggaggt ggttctca ggaagac gagctgt ggaagcagtt ggaagcagtt ggaagcagtt ggaagcagtt ggaagcagtt ggaagcagtt ccacctga caattatg catttct agccttct ctagaatg	P	Homo sapiens
673	194878	MrgX3 G Protein-Coupled Receptor	AY042215	QDTRHGNRC RAGCSNSLT RKAQAGAP APNSHACRLP LQDSPVPRTK MTPNSTGEVP SPIPKGALGL SLALSLIT ANLLALGIA GTACCAATCW LLLPEPTAGW AAGSGIATL PGLWNQRRR YWSCLLYLA PNFSLSLA NLLVHGERY MAVLRPLQPP GSIRLALLT WAGPLLFASL PALGWNHWT GANCSSQAF PAPLYLEVY GLLPAPVGA AFLSVRLAT AHRQLQDICR LERA VCRDEP SALARALTWR QARAQAGAML LFGLCWGPYV ATLLSVLAY EQRPLPGPT LLLSLGS A AAVPVAMG LGDQRYTAPW RQPPKGACRG CGEPPGTVP APALPTTQAA KAVSTWT tcaggccag gataagtaa tcatgggtc caccagcag gctagtag ggggggtgt tgaatcaa tgtattcc atgttagc agaatgtg tggcagtaga gtagggcag gctcagat cagcaagaac tggattcaa acitggattg aggacccca cctttgata ggtgactat tctgtgag tctgtatc ggccttta aatgaggaag taaatccac atggcagggt gggggggaga atcagagc atacagctgg tgalcacaac tgggttgt ttccagggt accagactgg ggtttctgag catggattca accatccag tctgggtac agaaactgaca caaatcaac gacgtgagga gactctgc tacaagcaga ccctgagct cagggggctg acgtgcatg ttccctgt cggcctgaca ggaacggg tttgtctg gctctggg tggcgatg gcaagagc tgtctcat taaatcaa accctggc ggcggact cctctta ggcggccat taaatgct ccgttagcc taaataa cggccatcc atctcaaaa tctctggc ccatctgg ccatctgg ccatctgg agcggccatca gacccagc cttctgtcc atctgtgg ccatctgg ccatctgg ccatctgg ggctatgt gtcctgt cttgtgt cttgtgt cttgtgt cttgtgt cttgtgt cttgtgt tctgtgt gaaacgtc atttattc aatcgtgt cttgtgt tctgtgt tctgtgt tctgtgt tctgtgt caggattc tgggtatcc ggaagatcc gctgacagg cttgacatg caatctct caccgtgt gcttctcc tctgtgt ggcctgtg atcaggtgg cctgtttc caggatcc cttgagga aggtctat tttgtgt cactagt ccatttct gtcgtct aacagcagg ccaacccat catttct tctgtgt cttgtgt cttgtgt cttgtgt tgaagctgt tctcagag gctgtcag acagccctga ggtggagaa ggtggaggt ggttctca ggaagac gagctgt ggaagcagtt ggaagcagtt ggaagcagtt ggaagcagtt ggaagcagtt ggaagcagtt ccacctga caattatg catttct agccttct ctagaatg	A	Homo sapiens

674	194878	MrgX3 G Protein-Coupled Receptor	AAK91806.1	MDSTIPVLGT ELTPINGREE TPCYKQQLSF TGLTCIVSLV ALTGNAAVVLW LLGCRMRRNA VSIYILNLVA ADFLFLSGHI ICSPRLRINI RHPISKILSP VMTFPYFIGL SMLSIASTER CLSIL WPIWY HCRRPRYLSS VMCVLLWALS LLRSILEWMF CDFLFSGADS VWCETSDFIT IAWL VFLCVV LCGSSLVLLV RILCGSRKMP LTRLVYVTLT TVLVFLLCGL PFGIQWALFS RIHLDWKVLV CHVHLVSIFL SALNSSANPI IYFFVGSFRQ QRNRQNLKLV LQRALQDTPE VDEGGGWLPQ ETELESGSRL EQ	A	Homo sapiens
675	194903	G Protein- Coupled Receptor GPCRB3	LG100657	tcaggfvgag ccgacagcc tegtgiagc cigaatggag gcctgggaagt gctctgigt gttgaggtc gggcggcgaga ggatcacgta gcactiagcc agaaaatacc caccgaagcc gctgctcagg ctgctcagcc cagccatcat gttggccggca ggcaggtaact tggcgtcgta gacgctggcc gttgttgaaga aggcgatacca ggacacgaag ttgaagagca ggcctgaagt gacacattg gcctcgttgr agttcttgg caagtctta cccagtgtagc tgcacagcaaa ggacactgag gaggaggagcc cattgtagag gaagggccca atgaaagccca gggaatttgg ctctgtcac tcaagatca ccaagatgggg gaagcgcctgg tatctccag caggcagtg gggtccacc accagccaag ttgaacagat aagcagctgg gcgcctgtagc tgaatcac aaacaggcca gcaccgttgg ttggaccca ggccgttggtag aaltgtagta ccttggggga aaacttgaag atgtatgta gttggaaatga gcgaactgtc aggcagggaca ggaaagatgg gtgaaccaaagg gcaagagagg ccgtggcgttag caagcacgca ggccttgggt gttcccaaa gaagccatag aggcctggcac taacctggcc caggggagcc agcalaaaga agcacaggccg ggccctgtct gactcacca cagggggtgtc taggttggcag gcaaacaggcc caggcagtcoc aagcagcagc agcacgca ggcgtgttagc tgcacagcgc acccaagagg ttgtctcagc caaagccaaa aacacacacag tgcgggggga gcaagcttgg cttccctcag gttgccac tttcttcca caaggctggc atctgttagg gtctgaagag gaaaggcccaag aaagtttcttg agagccagat gagcagagta ggaataggaa ataggggccct gcaagatact gggaagattg taaccaggcca gcttagactat actaggcata gtgggtaggg agtggccggcc agtggggccct gaggggcagc atttctcaa aatgctgtgt ttaattacag acttggga gacaggct gggtctgtag ccatagagg ttggcaaac ctagggggag accttaacct ggtagctctg cccacatcc agaaagta cgaatgtag ggagagagct gctcccaagg gaggggcattg taacctct ctctggcag cattccag aaccatttc ctgagctgct gctctgttgg ttcttctgg cctggacccc tgaaggacaga aggggaagt tccgtccct acagagatgg tgaaggaaa gaagtggcc ccttggacac aactaaggac ctgagctctt agctaccaa tttggctct gttctgacc ttgattct ggatggggaa tgcgtttt ttcttctg cagacacgct agtatctgta ttacggcca gctgttcaag gaggtagctg tcttggcat gggaacacaga agggacagta ggaacaaagg gcaacaaagg aacaaatgct atattcatt agagaaagag gttgaatca ggatacact gctttttag agattgttag gacagctctc taacagaggga cacacctcag tcaaaggct ttacgttggct aattctct ttcttct ttgttgaaga cagagtttt ctcttgcg ccaggcttga gttcaatgg gcaatctgg ctacttcca cctccggcct ccgggttcaa gcaatttcc tggctcagcc tccggagtga ctgggaattac aggcacacgc cacaacgccc ggctaaatt ttgttatt ttagttaga tggggtttca ccatgttgg cagggtctgtc tgaacct ggaccaggt gatcaccca cctcggctc ccaaatggtt gggaattacag gttggagcca ccggccggcc cctcttct tttttgggg ggaacgaalt tgccttgg gttcaggctg gaatgcat tggctcactg caacctccg ctcttgggtt caatgtatc tctgtctca gcctccggag tagctgggtac tacaggcagc cggcaccca ccaagctaat tttaatt ttgttagag atgggggttc accaatttgg ccaggcttgg ctgaactcc ggaactcaag tgaatccoc gctcagctt cccaaatggc tgggaattaca ggcataggcc accggaccca gtggctgatt ctcttgaatca gaattctg tggatcaggg ccaatccccc accgttgaag acttggcagcc cagtgtactg gccttgggtc tggggcaggg cacttggggc ccaaggggagg ccttccctcc accgttgaag ccccggggagt gcttgggtagc tgccttgc cattggccac tcaacctct ttttgggtt tcaagacagt gcttgggaaca cacagactta cacactcaaa gacgagta tgggaacccc taaccactog ctgttggcct tcaagacagt gcttgggaaca cacagactta ggcacctgta agaaagcaga ggggccacac gttagggggccc aagttaaagg acagctcaca ttttgggaacag aaaaagaaat ctcttggcat ctggcctcag ggctactcc caggggcagggg ccccttggctg tttgaacttc cggccagggg catctgcaca		Homo sapiens

[illegible]

[illegible]

Homo sapiens

М

[illegible]

**G Protein-
Coupled Receptor
GPCRB3**

194903

676

677	194904	WO0034334- hFB41A	AX147788	<p>VLGSTWSPV QLNINETIQ WHGKNHQVPK SVCSSDCLEG HQRVVTFHH CCFECVPCGA GTFLNKSELY RCQPCGTEEW APEGSTCFP RTVVFLALRE HTSWVLLAAN TLLLLLLGT AGLFAWHLDI PVVRSAGGRL CFLMLGSLAA GSGSLYGFEG EPTRPACLLR QALFALGFTI FLSCLTVRSF QLIIFKFST KVPTFYHAWV QNHGAGLFVM ISSAAQLLIC LTWL VVWVTP L PAREYQRFP LVMLECTETN SLGFLAFLY NGLLSISAF CSYLKDLPE NYNEAKCVTF SLLNFVSVWI AFFITASVYD GKYLPAANMM AGLSLSSGF GGYFPLKCYV ILCRPDLNST EHFAQSIQDY TRRCGST</p> <p>gagcaacatg atcttttga agtacttgac ggtgicgttc ttgacggta cgaagcacag agtgtgac atgctgtgc tcatggcat gcactgacg atgtagaagg cagttagga gvgcttctcc ttcaaaaca cgttgggaa gaagtcgoc acgatggta agcgttagaa gggcgccag calagcaagt aggggtgag gatgcacatg agccacaga cgtcttct gggcagcgc agccttgc ggtatgctc tcttggat ccaggaccg cctgaacca gactccgg gagatcttgg calagcacag ggtcatggg accaggggc ccacgaatc taigccaaag alaaagagga agtaggacti gtagtagagc tcttggcca caggccagat cggcgccag aagatctt cctggctt gacatgacg aggaccgt cgttgggaa gtaggcggaa gggatggcga tcaagtagga caccgtccac accaaggca tcaaggcagt ggtgttgg cacttatic gtagtctag cggatggaca atagccagat acctaggga agaacaag tggaggcag c</p>	Homo sapiens
678	194904	WO0034334- hFB41A	LR114	<p>MGFMDDNATN TSTSFLSVLN PHGAHATSP FNFYSYDYM PLDEDEDVTN SRTFFAAKIV IGMALVGIML VCGIGNFIFI AALVRYKKLR NLTNLLIANL AISDFLVAIV CCPFEMDYV VRQLSWEHGH VLCTSVNYLR TVSLYVSTNA LLAIDRYL AIVHPLRPRM KCQTATGLIA LVWTVSILIA IPSAYFTTET VLIVKSQEK IFCGQIWPVD QQLYKSYFL FIFGIEFVGP VVTMTLCYAR ISRELWFKAV PGFQTEQIRK RLRCRRKTVL VLMCILTAYV LCWAPFYGT IVRDFPTVF VKEKHYLTAF YIVECIAMSN SMINTLCFT VKNDTVKYFK KIMLLHWKAS YNGGKSSADL DLKTIGMPAT EEVDCIRLK</p>	Homo sapiens
679	194905	G Protein- Coupled Receptor MGC7035	BC014241	<p>ggcacgaggc gccggcgcc atgtggagt gacgttggt caacggcaca gggcttgggg agggagctggc tgcctggcag gaactggcgc tggggctgic actgtgtgc cgtgtgggoc tgggtgggg cgtggcagtg ggcctgtgct acaagccct gctgtgtcgg gccaaacctac acagcaaggc cagcatgacc atggcggagc tgiacttgt caacatggca gtggcaggcc tgggtgtcag cggcctggcc cctgtgccc tgcctggccc ccgaggtcc cgttggggc tgttggagt gggcggcgaa gtccagtggg cactgcagat cccctcaat gttgtctcac tgggtggccat gtiactcacc gccctgttga gctcggacca ctacatggag cgtgcactgc cggggaccia catggccagc gttgtacaaca cgtcggcacgt gttcggcttc gtttgggtg ggcgctgct gaccagcttc tctcgtgc tcttctacat cttcagccat gttccacc gctcggctaga gttcggccaag atgcagaaac gagaagctgc cgaagccagc ctgtgttca tgggttact gtttggcagca cttggccaacc tctacggct ggtgtctac tcccgctcc gcaaggagga cagcgccctg gacggggaca cggcgccgt gtagggccctg gcacacaggc tgttggggc caccgtgtgc acgagttg ggtcttggac gccacatct ctgactcgc tggggcacac ggtcaltc tcggaggga agccgttggg cgcacactac cttggggctac tgcattgt gtaggtttc tccaaactcc tggccttc cagcagcttt gtagaccac ttcttaccg ctacatgaac cagagttcc ccagcaagt ccaacggctg atgaanaagc tgtcctggcg ggaacggcac tgcctcccg accacatggg gttgcaagcag gttctggcgt agggggcca gccctctgg ggagactga ctctgggga cgcagagcac ttatgaccc tggagctcc ccacatct ccagaaaggc acgagctgtc ggagaggaag caggaggggt gttttctg aagtttct ttccacaa algocactct tggggcaagg cttgtgtccc cgttggctgg atctggcttg agtctcccg aggccttggc gttctccaa cagcagctc aaggtccaca tctgcaaaag</p>	Homo sapiens

680	194905	G Protein- Coupled Receptor MGC7035	LR112	<p>ccctctgcc ttacgctcc tcagcattca gtttgcaat gaagtgatga aagctiagag ccagtiattia lactttgtgg ttaaaatact tgattccccc ttgtttgttt tacaaaaa gatgttctt agaaaaatga caaatagtaa aatgaacaaa accctacgaa agaattggcaa cagccagggt ggccggggcc tgcagtggtg cggcggtgct tgcgaaggcc tgcgggtgtg gcccagtgca ccacagggtt ctgagaacat ttacagaag tgcctgagac gggaagacat ggctgtgtt aaatggagct attcaatagc agtgacgctg tctccicag caccaaatgt cccigacacc ciccacagcc cccacagata acatcagtg aggtttttt cagtatgaac ctgtcctaaa tcaattctc aagtgigca caaaactaaa gaataataat aaacaaaaa aaggtgaaa aaaaaaaa aaaa</p> <p>MWSCSWFNGT XLVEELXACQ DLQLGLSLLS LLGLVGVVPV GLCYNALLVL ANLSKASMT MPDVYFVNMA VAGLVLSALA PVHLGPPSS RWALWSVGE VHVALQIPFN VSSLVAMYST ALLSLDHYIE RALPRTYMAS VYNTRHVCGF VWGGALLTSF SLLFYICSH VSTRALECAK MQNAEAAADAT LVFIGYVVPV LATLYALVLL SRVRREDTPL DRDTGRLEPS AHRLLVATVC TQFGLWTPHY LILLGHTVII SRGKPVDAHY LGLLHFVKDF SKLLAFSSSF VTPLLRYMNN QSFPSKLQRL MKKLPCGDRH CSPDHMGVQQ VLA</p>	P	Homo sapiens
681	194907	G Protein- Coupled Receptor 14273	LD22826	<p>TCCGGACTAG TTCTAGACCG CTGCGGGCCG CCAGGGCCG GGAATGTCCC CTGAATGCGC GCGGGCAGCG GCGACGCGC CCTTGCGCAG CCTGGAGCAA GCCAACCGCA CCGGCTTTCC CTCTCTTCC GACGTCAAGG GCGACCAACG GCTGTGCTG GCGCGGTGG AGACAAACCGT GCTGTGTCTC ATCTTTGCAG TGTCGCTGCT GGGCAACGTG TGGCCCTGG TGCTGTGGC GCGCCGACGA CGCCGCGCG CGACTGCCTG CCTGTACTC AACCTCTTCT GCGGGACCT GCTCTTCATC AGCGTATCC CTCTGGTGTG GCGGTGCGC TGGACTGAGG CTCCCTGCT GGGCCCCGT GCGTCCACC TGCTCTTCTA CGTGATGACC CTGAGCGGCA GCGTACCAT CCTCACGCTG GCGCGGTCA GCCTGGAGGG CATGCTGRC ATCGRGACC TGGAGCGCG GGTGCGGGGT CCTCCGCGG GGCGCGGGC AGTGCTGCTG GCSCTCATCT GGGCTATTG GCGGTGCGC GCTCTGCTC TGTGCTCTT CTTGCGATC GTCCCGAAC GGTCCCGG CGCCGACCG GAAATTTGGA TTTGCACACT GATTGGGCC AGCATTCCTC GAGAGATCTC GTGGGATGTC TCTTTTGTTA CTTTGAACTT CTGTGTGCA GGACTGGTCA TTGTGATCAG TTAATCCAAA ATTTACAGA TCACAAAGG ATCAAGGAAG AGGCTACCG TAAGCTGCG CTACTCGGAG ACCCACCAGA TCCGCGTGTG CCAGCAGGAC TTCCGGCTCT TCCGACCTT CTCTCTCTC ATGGTCTCTT TCTTCATCAT GTGGAGCCC ATCATCATCA CCATCTCTC CATCTGATC CAGAACTTCA AGCAAGACCT GGTATCTGG CCGTCCCTCT TCTTCTGGT GGTCCCTTC ACATTGTCTA ATTCAGCCCT AAACCCCATC CTCTACACA TGACACTGTG CAGGAATGAG TGAAGAAAA TTTTGTGTG CTTCTGGTTC CCAGAAAAGG GAGCCATTT AACAGACACA TCTGTCAAAA GAAATGACTT GTCGATTAAT TCTGGCTAAT TTTCTTTATA GCGGAGTTTC TCACACCTGG CGAGCTGTGG CATGCTTTTA AACAGAGTTC ATTCCAGTA CCCTCCATCA GTGACCCCTG CTTTAAAGAA ATGAACCTAT GCAAATAGAC ATCCACAGCG TCGTAAAT AAGGGGTGAT CACCAAGTTT CATAATATTT TCCCTTTATA AAAGGATTG TTGGCCAGGT GCAGTGGTTC ATGCCTGTAA</p>	A	Homo sapiens

682	194907	G Protein- Coupled Receptor 14273	LR116	<p>TCCAGCAGT TTGGGCTGAG GTGGGTGGAT CACCTGAGGT CAGGAGTTCCG AGACCAACCT GACCAACATG GTGAGACCCC CGTCTCTACT AAAAATAAAA AAAAAAATTA GCTGGGAGTG GTGGTGGCA CCGTAATCC TAGCTACTTG GGAGGCTCAA CCACGAGAA CTCTTGAACT TGGGAGGCA AGGTGTCAGT GAGCCGAGAT CGTGCCATTG CACTCCAAACC AGGGCAACA GAGTGAAACT CCATCTTAAA AAAAAAATAA AAAGATTGT TATGGGTTC TTTTAAATGT GAACTTTTT AGTGTGTTT TATATGATCA AATTATAA ATATTATTT ATGACTGTTC AGCAAAAAA AAAAAAATA AGGGCGG MSPECARAAG DAPLRLEQA NRTRPFFSD VKGDHRL VLA AVETTVL VLI FAVSLGNVC ALVLVARRRR RGATACLVN LFCADLLFIS APLVLA VRW TEAWLLGPVA CHLLFYVMTL SGSVTIL TLA AVSLDRMVC VMLQRGVRCR GRRARAVLLA LIWGYSAAA LPLCVFFRV PQRPLGADQE ISICLIWPT IPGEISWDVS FVTNLFLVPG LVIVISYSKI LQTTK ASKR LTVSLAYSRS HQIRVSQQDF RLFRITFLLM VSFIMWSPI IDTILLIJQ NFKQDLVIWP SLPPWVVAPT FANSALNPIL YNMTCRNEW KKIFCCTWFP EKGAILTDT S VCRNDLSIIS G ITYSAISDEL RDKVRFPALL RTTPSADHHV EAMVQLMLHF RWNWIIVLVS SDTYGRDNQ LLGERVARRD ICIAFQETLP TLQPNQNMST EERQLVTIV DKLQOSTARV VVVFSPDLT YHFFNEVLQ NFGAVVIAS ESWAIDPVLH NLJELGHLGT FLGITIQSVP IPGFSEFREW GPQAGPPPLS RTSQSYTCNQ ECDNCLNATL SFNTILRLSG ERVVVYSVSA VYAVAHALHS LLGCDKSTCT KRVPYPWQLL EEIWKVNFTL LDHQIFDPQ GDVALHLEIV QWQWDRSQNP FQSVASYPL QRLKNIKTS LHTVNNTIPM SMCKRCQSG QKKKPVGIHV CCFECIDCLP GTFLNHTCP NNEWSYQSET SCFKRQL VFL EWHEAPTIAV ALLAALGFLS TLAILVFWR HFQTPIVRSA GPMCFMLT LLLVAYMVVP VYVGPVKVST CLCRQALFPL CFTICISIA VRSFQIVCAF KMASRFPRAV SYWVRYQGPY VSMAFITVLK MVIVVIGMLA RPQSHPRIDP DDPKITIVSC NPNYRNSLLF NTSLDLLSV VGFSFAYMGK ELPTNYNEAK FITLSMTFYF TSSVSLCTFM SAYSGVLVTI VDLLVTVLNL LAISLGYFGP KCYMILFYPE RNTPAYFNISM IQGYTMRRD</p>	P	Homo sapiens
683	194908	G Protein-coupled Receptor Gpcrb4	LR117	<p>atgagcagca attcatcct gctggggct ggcagctgt gciacgcaa cgtgaatggg tctgtgtga aaatccctt ctgcggga tccgggga tctgtatc agtggggc ttggggcgt tctgggaaac cctcgtgtga tggatcaat ctccattc aagcagctgc actctc-gac caattctc gtgctctc tggcctgcgc tgaattctg ggggtgtga cgtgtgtg cttcacatg gtcaggacgg tggagagctg cgtgtattt gggagggagt ttgtactt ccacactgc tgtgtgtg cttgtgtg ctctctc ttcactgt gctcatc catcgacagg taccatggg taccatggg taccatggg taccatggg taccatggg tgtgtcagga attgtcatc gctgtctg gctgtctg ctcacatg ctcacatg gctgtgtgt gttcacaca ggtgtgtgt acgaggggt ggaggaatia tctgtgtgt taaactgt agggaggtgt cagaccgtgt taaatcaaaa cgtgtgtgt acagattt taccitct tatactac ttattatga taattatga tggtaacata ttctgtgtg ctagagaca ggcgaataag atagaaaaa cgtgtgtgt gacagaalca tctcagaga gtiacaaag cagagtggtc agggagagga gaaagacagc taaacccgt ggggtcacag tggtagcat tagtattca tggtagcat atagcatga ttcattat gctgtgtgt tgggtgtgt aaccctgtc tgtattgt agattgtgt tgggtgtgt tatataact cagocagaa tctgtgtgt ttacocat gtttaggaa gcaataaag</p>	P	Homo sapiens
684	194957	Trace Amine Receptor 4 (TA4)	AF380192		A	Homo sapiens

685	194957	Trace Amine Receptor 4 (TA4)	AAK71243.1	<p>ttattgtaac tggcaggt taaagaaca gtcagcaac catgaattg ttcttgaac alataaa MSSNSSLLVA VQLCYANVNG SCVKIPFSPG SRVILYVFG FGAVLAVFGN LLVMISILHF KQLHSPTNFL VASLACADFL VGVTVMPFSM VRTVESCWYF GRSFCFHTC ODVAFCYSSL FHLCFISDR YIAVTDPLVY PTKFTVSVSG ICISVSWILP LMYSGAVFYT GVDYDGLLEL SDALNCIGCG QTVVNQNWVL TDFLSFFIPT FIMILYGNL FLVARRQAKK IENTGSKTES SSESSEYKARVA RRERKAAKTL GVTVAFMIS WLPYSDSLI DAFMGFITPA CIYEICCWCA YVNSAMNPLI YALFYPWFRK AIKVVITGVQV LKNSSATMNL FSEHI</p>	P	Homo sapiens
686	194958	Trace Amine Receptor 5 (TA5)	AF380193	<p>atgaccagca attttccca accgttgg cagcttggc atgaggatgt gaalgatct tgaatgaaa ctccctatic tccctggctc cgggtaatic tgaacagcg gtttagctt gggtcttggc tggctglat tggaaatctc ttgataaga ctctgtct tcatlliaag cagctgcaat ctcaacaaa ttittcatt gggtcttggc cctgtctga ctcttgga tgggtgactg tgaigtctt cagcatgtc aggacgttgg agagctgtc gtttttgg gccaattt gtaacttca cagttgtgt gttgtgcat ttgttact ttctgtctc cacttgtct tcatgtcat cgacaggatc atttgggtta ctgacctt ggctatgt accaagtica cctgtgtgt gtcgggaat tgcacagcg tgcctggat tctgtctc acgtacagcg gtcgtgt ciacacaggt gicaatgag atgggctgga ggaaatgta agtgcctca actgcgtagg tggctgcaa attattgaa gtaacagcg ggtgtgata gatttttgt taittcat acctacctt gttatgata ttcttacag taagatttt ctatagcta aacaacagc taaataat gaaactacta gtagcaaat agaalcalcc tgaagatgt ataaacagc agtggccaag agagagagga aagcagctaa aacctgggg gtcacgtac tagcattgt tattcatgg tiaccgtata cagttgat attaatgat gctttatgt gcttcagc cctctcat atctatgaaa tttgggtg gagtgctat taaacagc ccatgaatcc ttgattat gcttattt alctctgt taggaagcc alaaactia tttaagtg agatgitta aaggtatgt catcaatc tagttatt tgaataa</p>	A	Homo sapiens
687	194958	Trace Amine Receptor 5 (TA5)	AAK71244.1	<p>MTSNFSQPVV QLCYEDVNGS CIETPSPGS RVILYTAFSF GSLLAVFGNL LVMTSVLHFK QLHSPTNFLI ASLACADFLV GVTVMLFMSV RTVESCWYFG AKFCTLHSCC DVAFCYSSVL HLCFICIDRY IVTDPVYA TKFTVSVSGI CISVSWILPL TYSGAVFYTG VNDDGLEELV SALNCVGGCQ IIVSQGWVLI DFLFFIPTL VMILYSKIF LIAKQQAII ETTSSKVESS SESYKIRVAK RERKAATLG VTVLAFVISW LPYTVDLID AFMGFLTPAY IYEICCWSA YNSAMNPLIY ALFYPWFRKA IKLLSGDVL KASSSTISLF LE</p>	P	Homo sapiens
688	194989	MrgX4 G Protein-Coupled Receptor	AY042216	<p>tgcaltgct tcttctgt ccatgatga ccagtctag tcaagatgt gtaacacca cctcttgg tatctgaatt cctccacctg aaagaaaatt tcagaccag gatagattaa tcatgggtc caaagccctg gccggatgag tgggggtgt ttgactaa tgttatcc atgtcagcac agaactgtg tggcagtaga gtagatgtcag gcttcagat caacaagaac tggattcaa actgattg aggacccca cctttggtaa gtagattat atctgcagc ctctgtct ctcttcta atgaggaga gtaaatcca tacggcagg tggggggag aatcagaat galacagctg gtagacat ctggttgg ttccagggg caccagaa gatttttga gcatgatalc aacctgcca gttctgga caaaactgac accaataac gtagctgtag agactctg ctacaatcag acctgagct tcaagggtc gactgtcalt atttccctg tggagctgac aggaacagcg gtagtctct ggctctgg ctaccgcat gtaggaacg ctgttccat ctacatcct aacctggccg cagcagact ccttctc agcttccaga ttatgctt gcaatagc ctatcaata ttagccatct calccgcaa atctctgtt ctgtatgac ctctccat ttacagcc tgaatgtc gtagccatc agcagcagc gctgctgtc tgtctgtg ccatctgt accgtgccc ccgcccaca cactgtcag cgtctgtg tgcctgctc tggggccctg cctctgtt tgaatgtc gtagggagt tctgtact cclgttatt gggtgtgatt clagtgtg tgaacagca gatttcalc cagctgctg gctgattt ttatgtgt ttctgtgt ttccagctg gttctgtc tcaagatct ctgtgtatcc cgggaagatc cgtgtacag gctgtacgt accatctgc</p>	A	Homo sapiens

689	194989	MrgX4 G Protein-Coupled Receptor	AAK91807.1	<p> tcaagtgct ggtctctc ctcigegcc tgccttcgg cttctcgg gcctaatt acaggatga cctgaattg gaagcttat attgcatgt tlatcgtt tgcagccc tgcctctt aaacagtagt gccaaoccca tcaattact cttctgggc tctttaggc agcgtcaaaa taggcagaac cigaagctgg ttccagag ggtcttgag gcaagocctg aggtggataa aggtgaagg cagcttcctg aggaagocct ggagctgctg ggaagcagat tggggccalg agggagagcc tctccctgt cagtcagacg ggactllgag agcaacacig tctggccacc cttgacaatt acatgggtt ttttagcgt ttgcctcag aatgtctca gttgaactc aaggtctca aataatgt tattaact gacagttgca gttttacc atgggaagca ttgctgac agtacaagt ttgg MDPTVPVFGT KLTPIINGREE TPCVYNQTLSE TPLTCLISLV GLTGNAVVVLW LLGYRMRRNA VSIYLNLA ADELFLSFQI RSPLRLNI SHLRKILVS VMTPYFTGL SMLSIASTER CLSVLWPIWY RCRPHLSA VVCVLLWGLS LLSMLEWRF CDFLFGADS SWCETSDP VAWLIFLCVW LCVSSVLLV RILGSRKMP LTRLVVTLL TVLVLLCGL PFGILGALY RMHLNLEVL YCHVYLVCMSL SSLNSSANPI IYFFVGSFRQ RQNRQNLKL V LQRALQDKPE VDKGEGQLPE ESLESGSRL GP </p>	P	Homo sapiens
690	195015	G Protein- Coupled Receptor GPR82	AF411111	<p> atgaacaaca atacaacalg tatcaacca tctatgatct cttccatggc ttaccaatc attatcacc tctttgat tgttggtgt ttggaaaca cttctctca algatatt ttacaaaaa taggtaaaaa aacatcaacg cacatctacc tgcacacct tggacigca aacttactg tggcagtg cagcttc atgagatct attctgaa aggtttccaa tgggaatac aatctgctca atgcagagtg gtaatttic tgggaactct atcagcat gcaagatgt ttgtcagct cttaattta agtggatg cctaagcog ctatgctacc ttaatgcaaa agggattctc gcaagagact acitcagct algagaaaat attttatgg cattactga aaaaatttcg ccagcccaac ttigtgaa aactatgcat ttacatgg ggagtgtgac tgggcataat catctcact accgtact acitcagat agaggctaca gaaggagaag agagccatg ctacaatgg cagatggaac taggagccat gatctctcag atgcaggtc tcatgggaac cacatttat ggattttct tttagt actaacatca tactactt ttgaagca tctgagaaa atagaacct gtagtccat tatggagaaa gatttgact acagtctgt gaaaagacat ctttggtca tcaagatt actaatgt tgcctctc ctatagat tttaaaccc atttttatg ttctacaca aagagataac tgcagcaat tgaatttt aatagaaa aaaaacalc tcaactgt tgcctggcc agaagtagca cagaccocat tatattct ttatagaca aaacatcaa gaagacacta tataatctc ttacaaagc taatcagca catatgaat catatgggtg a MNNTTTCIQP SMISSMALPI IYLLCIVGV FGNTLSQWTF LTKIGKKTST HYLSHL VTA NLLVCSAMPF MSYFLKGFQ WEYQSAQCRV VNFLGTL SMH ASMFVSLIL SWAISRYAT LMQKDSQET TSCYEKIFYG HLLKKFRQPN FARKLCYIW GVVGLIIPV TVYYSVIEAT EGEESLCYNR QMELGAMISQ IAGLIGTTFI GFSFLVLT YYSFVSHLRK IRTCTIMEK DLTYSVSKRH LLVIQILLV CFLPYSIFKP IFYVLHQDN CQQLNYLIET KNLTCLASA RSSTDPIFL LLDKTFKKTL YNLFTKSNSA HMQSYG </p>	A	Homo sapiens
691	195015	G Protein- Coupled Receptor GPR82	AAL26482		P	Homo sapiens

SEQ ID NO:	LSID	Gene	Source ID	Sequence	Code	Species
1	127	5-HT1A Receptor	NM_000524	atggatgtgc tcagccctgg tcagggcaac aacaccacat caccaccggc tccctttgag accggcgcca acactactgg tatctccgac gtgaccgtca gtaccacagt gatcacctct ctgtgtctgg gcacgtctcat cttctgcgag gtgtctggga atgctgaggt ggtggctgac atgccttgg agcgtccct gcagaaactg gccaatatc ttattggctc ttggtcggtc accgacctca tgggtcggt gttgtgctg cccatggcg cgtgtatca ggtgtcaac aagtggacac tgggccaggt aacctgcgac ctgttcacg cctcgacgt gctgtgtgc acctcatcca tcttgacact gtgcgccatc gcgtggaca ggtactgggc catcacggac cccatcgact acgtgaaca gaggaagccc cggcgcgctg cgtcatctc gtcacttgg cttattggct tctcatctc tatccgccc atcctgggt acactatcta ttccacctt tcggacccc acgcatgcac cattagcaag gatcatggct ggcgacccc ggaagaccgc ggagctttct acatccgct gctgtcatg cgtgtctct atggcgcat attccgagct gcgccttcc gcaccgcaa gacgtgcaa aaggtggaga agaccggagc ggacaccgc catggagcat ctccgccc gcagcccaag aagagtgtga atggagagtc ggggagcagg aactggaggc tggcggtgga gagcaaggct ggggtgtctc tgtgcgcaa tggcgcggtg aggcaagggt acgatggcg cgcctggag gtgatcgagg tgcaccagt gggcaactcc aaagagcact tgcctctgc cagcaggct ggtcctacc cttgtgccc cgcctcttc gagaggaaaa atgagcgcaa cgcgaggcg aagcgcaaga tggccctggc cggagagagg aagacagtga agacgtggg catcatcatg ggcacctca tctctgtctg gctgcccttc ttcatcgtgg ctctgttct gccctctgc gagcagctg gccacatgcc caccctgtg ggcgccataa tcaattggct gggtactcc aactctctgc ttaaccccg catttacgca tacttcaaca aggactttca aaacgcgtt aagaagatca ttaagtgtaa cttctgcgc cagtga	A	Homo sapiens
2	127	5-HT1A Receptor	NP_000515.1	MDVLSPGQGN NTTSPPAPFE TGGNTTGISD VTVSYQVITS LLLGTLIFCA VLGNACVVAA IALERSLQNV ANYLIGSLAV TDLMSVLVL PMAALYQVLN KWTLGQVTC LFIALDVLCC TSSILHLCAI ALDRYWAITD PIDYVNRTP RPRALISLTW LIGFLISIPP ILGWRTPEDR SDPDCTISK DHGYTIYSTF GAFYIPLLLM LVLYGRIFRA ARFRIRKTVK KVEKTGADTR HGASPAPOPK KSVNGESGR NWRLGVESKA GGALCANGAV RQDDGGALE VIEVHRVGN KEHLPLPSEA GPTPCAPASF ERKNERNAEA KRKVALARER KTVKTLGIIM GTFILCWLPF FIVALVLPPC ESSCHMPTLL GAINWLGY NSLLNPVIYA YFNKDFQNAF KKIKNFCR Q	P	Homo sapiens
3	128	5-HT1B Receptor	NM_000863	atggaggaaac cgggtgtctca gtgcgtcca cgcgcgcgcg cgggctccga gacctgggtt cctcaagcca acttatctc tgcctctec caaaactgca gcgccaagga ctacatttac caggactcca tctccctacc ctggaaagta ctgctgggta tgctattggc gctcatcacc ttggccacca cgtcttcca tgcctttgtg attgccacag tgtaccggac cgggaaactg cacacccggg ctaactacct gatgcctct ctggcgggtca ccgacctgt tgtgtccatc ctggtgatgc ccatcagcac catgtacact gtccacggcc gctggacact gggccaggtg gtctgtgact tctggctgtc gtggacatc actgtgtgca ctgcctecat cctgcacctc tgtgtcatcg ccctggaccg ctactggcc atcacggagc cgtggagta ctacgctaaa aggactccca agagggcggc ggtcatgac gcgtgtgtg ggtctcttc catctctac	A	Homo sapiens

NP_000854.1
5-HT1B
Receptor

4

128

tcgtgcccgc cttttctctg gcgtcaggct aaggccgaag aggaggtgtc ggaatgcgtg
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aactccctca tcaaccccat aatctatacc atgtccaatg aggactttaa acaagcattc
cataaactga tacgttttaa gtgcacaagt tga
MEEPGAQCAP PPPAGSETWV PQANLSSAPS QNCSAKDYIY QDSISLPWKV LLMVLLALIT P
LATLSNAFV IATVYRTRKL HTPANYLIAS LAVTDLLVSI LVMPISTMYT VTGRWTLGQV
VCDFWLSSDI TCCTASILHL CVIALDRYWA ITDAVEYSAK RTPKRAAVMI ALVWVFSISI
SLPPFFWRQA KAEDEVSECV VNTDHILYTV YSTVGAFFYP TLLILALYGR IYVEARSRL
KQTPNRTGKR LTRAQLITDS PGSTSSVTSI NSRPDPVPSE SGSPVAVNQV KVRVSDALLE
KKKLMAARER KATKTLGIIL GAFIVCWLPE FIISLVMPIC KDACWFHLAI FDFFTWLGYL
NSLINPIIYT MSNEDFKQAF HKLIRFKCTS

Homo
sapiens

NP_000864
5-HT1D
Receptor

5

129

agccaaatgt gtggaggtct gtgggaagag agagccacct agcatgtccc cactgaacca A
gtcagcagaa ggccttcccc agaggccctc caacagatcc ctgaatgcca cagaaacctc
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ttttcagaaa attgtccctt tccggaaggg cctcagatct tctcagatga ggtaaagaaa
MSPLNQSAEG LPQEAENRSL NATETSEAWD PRTIQALKIS LAVLSVITL ATVLSNAFVL P
TTILLTRKLH TPANYLIGSL ATTDLLVSL VMPISIAITI THTWNFGQIL CDIWLSSDIT
CCTASILHLC VIALDRYWA TDALEYSKRR TAGHAATMIA IVWAISICIS IPPLFWRQAK

Homo
sapiens

NP_000855.1
5-HT1D
Receptor

6

129

7	130	5-HT1E Receptor	NM_000865	<p> AQEMSDCLV NTSQISYTIY STCGAFYIPS VLLIILYGR I YRAARNRILN PPSLYGKRFT TAHLITGSAG SSLCSLNSL HEHSHSAGS PLFFNHVKIK LADSALERKR ISAAREKAT KILGILGAF IICWLPFFV SVLPLICRDS CWIHPALFDE FTWLGYNLSL INPIIYTVFN EEFRAQFKI VPERKAS atcgaatgtt gagagaagca gtgtcttgat ccagctcagg agaaaaagga gcgggttccg A agtgagactt ctggagccag ctggacgtgc cggtttgccc agtgcggcgc ggctgcacgc accgtccaca agagtctcag tgcgccaggc tggagtgca cagcacagtc tcacctcatt gcaacctccg cctcccgggt tcgcggttcc tggccctcag ctctcagta gctgggattg caggcaactca ccaccatgcc cggctaattt ttggaatttt tagtgagac gggattttcac catgttggcc atgtgtgtct tgaacccccg acctcggatg attcggccgc ctcggccctcc caaagtgtg gaattacagg cgaaccttca ctcagaagaa atgtgtggc cttcccttt accaacagaa aatggaacac aagagaccac atagtgaac aaattatagc ctccttaca gtgagaaacc ttcgaggcta catagttttc agccaaagga aaataaccaa cagcttctcc acagtgtaga ctgaacaag ggaacacatga agatgctcat ttgcatgact ctggtgtgca tggctataag acccaagacc atcaactgaga agtgtatcat ggctattggc accaccaaga tcaccacct caccacgttg ctgaacttgg ctgtatcat gtctctggc ctcctgttgg agctccacca gctgccaac tacctaattc gtctctggc cgtgacggc ctcctgttgg cagtgtcgt catgcccctg agcatcatct acattgtcat ggctcgttgg agcttgggt acttctcttg tgaggtgttg ctgagtggtg acatgacctg ctgcacctgc tccatctccc acctctgtg cattgcccctg gacaggtact gggccatcac caatgctatt gaatacgcca ggaagaggac ggcgaagagg gccgcgtga tgatctttac cgtctggacc atctccatt tcatctccat gccctctctg ttctggagaa gccaccgccc cctaaagccc cccctagtc agtgcacct ccagcacgac catgttatct acaccattta ctccacgctg ggtgcgtttt atatccccct gactttgata ctgattctct ataccggat ttaccacgct gccaaagacc ttaccagaa aggggatca agtcggcact taagcaacag agcacagat agccagaatt cttttgcaag ttgtaaactt acacagactt tctgtgtgtc tgacttctcc acctcagacc ctaccacaga gttgaaaaag ttccatgctt ccatcaggat ccccccttc gacaatgac tagatcacc aggaagacgt cagcagatct ctgacaccag ggaacggaa gacagcagca tcctggggct gattctgggt gcattcattt tatcctggct gccatttttc atcaagagt tgattgtgg tctgagcatc tacaccgtgt cctcggaagt ggcgacctt ctgacgtggc tcggttatgt gaattctctg atcaaccctc tgctctatag gagttttaa gaagactta agctggcttt taaaaagctc attagatgcc gagagcatac ttagactgta aaagctaaa aggcagact ttttccagag cctcatgagt ggtgggggtt aagggtgca acttattaat tcttgacat acttggttca gagagatttg taagtattg tggctctgtt ccttgtttg tttgtttgtt ttgtctgtt ttgttgagg attgtattt ggcgtgctgt tttctacctc tggctctatc tgtgatacat aatttcaat aaacattatc atacaaaaac aaaaaaaaa aaaaaaaaa </p>	Homo sapiens
8	130	5-HT1E Receptor	NP_000856.1	<p> MNITNCTTEA SMAIRPKTIT EKMLICMTLV VITTLTLLN LAVIMAIGTT KKLHQPANYL P ICSLAVTDLL VAVLVMPLSI IYIVMDRWKL GYFLCEVWLS VDMTCCTCSI LHLCVIALDR YWAITNAIEY ARKRTAKRAA LMILTWTIS IFISMPPLFW RSHRRLSPPP SQCTIQHDHV IYTIYSTLGA FYIPLTLILI LYRIYHAAK SLYQKRGSSR HLSNRSTDQ NSFASCKLTQ </p>	Homo sapiens

9	131	5-HT1F Receptor	NM_000866	<p>TFCVSDFSTS DPTEFEKFKH ASIRIPPFND DLDHPGERQQ ISSTRERKAA RILGLILGAF ILSWLPFFIK ELIVGLSIYT VSSEVADFLT WLGVNSLIN PLYTSEFNEK FKLAFKKLIR CREHT</p> <p>ctggatttct taaattcatc tgatcaaaac ttgacctcag aggaactgtt aaacagaatg A ccatccaaaa ttctgggtgc cctactctg tctgggtg cactgatgac aacaactatc aactcccttg tgatcgctgc aattattgtg accggaagc tgcacatcc agccaattat ttaaatttgt cccctgcagt cacagatttt cttgggtg tcttggtg gccctcagc attgtgtata ttgtgagaga gagctggatt atggggcaag tggctctgga catttggtg agtgttgaca ttacctgctg cactgtgctc atcttgatc tctcagctat agctttggat cggatcgag caatcacaga tgcgtgtgag tatgccagga aaaggactcc aaagcatgct ggcattatga ttacaatagt tggattata tctgttttta tctctatgcc tctctatc tggaggcacc aaggaactag cagagatgat gaatgcatca tcaagcacga ccacattgtt tccaccattt actcaacatt tggagcttcc tacatccac tggcattgat ttgatcctt tactacaaaa tatatagag agcaagaca ttataccaca agagacaaag aagtaggatt gcaaggagg aggtgaatgg ccaagtcctt ttgagagatg gtgagaaaa cactaaatca gtttccacat cctatgtact agaaaagtct ttatctgacc catcaacaga ctttgataaa attcatagca cagtgaag tctcaggtct gaattcaagc atgagaaatc ttggagaag caaaagatct caggtacaag agaacggaaa gcagccacta cctctggatt aatcttgggt gcatttggtaa tatgttggct tctttttttt gtaaaaaaat tagttgttaa tgcctgtgac aaatgtaaaa ttcttgaga aatgtccaat tttttggcat ggcttgggtg tctcaattcc cttataaatc cactgattta cacaattctt aatgaagact tcaagaaagc attccaaaag ctgtgctgat gtcgatgta g</p> <p>NP_000857.1</p> <p>LICSLAVTDF LVAVLNPFES IVYIVRESWI MGQVVDIWL SGLALMTTII NSLVIAAIIV TRKLHPHANY P RYRAITDAVE YARKRTPKHA GIMITIVWII SVFISMPPLF WRHQGTSRDD ECIKHDHIV STIYSTFGAF YIPLALIL YKIYRAAKT LYHKRQASRI AKEEVNGQVL LESGEKSTKS VSTSYVLEKS LSDPSTDFDK IHSTVRSLS EFKHEKSWRR QKISGTREK AATLGLILG AFVICWLPFF VKELVVNVCD KCKISEMSN FLAWLGYLNS LINPLIYTFI NEDFKKAFQK LVRRC</p> <p>gaattcgggt gagccagctc cgggagaaca gcatgtacac cagcctcagt gttacagagt A gtgggtacat caaggtgaat ggtgagcaga aactataaacc tgttagtctc tctacacctc atctgctaca agttctggct tagacatgga tattctttgt gaagaaaaata cttctttgag ctcaactacg aactccctaa tgcaattaaa tgatgacacc aggcctcaca gtaatgactt taactctgga gaagtaaca cttctgatgc attaaactgg acagtcgact ctgaaaaatcg aaccacactt tctgtggaag ggtgcctctc accgtcgtgt cctcctctac ttcactctca ggaaaaaaac tggctgctct tactgacagc cgtagtgtatt attctaacta ttgctggaaa catactcgtc atcatggcag tgcctctaga gaaaaagctg cagaatgcca ccaactattt cctgatgtca cttgccatag ctgatattgt gctgggtttc cttgtcatgc ccgtgtccat gttaaccatc ctgtatgggt accgtgggccc tctgccagc agcctttgtg cagtctggat ttacctggac gtgctcttct ccacggcctc catcatgcac cttcgtgcca tctcgtgga ccgctacgtc gccatccaga atcccatcca ccacagccgc ttcaactcca gaactaaggc</p>	Homo sapiens
10	131	5-HT1F Receptor	NP_000857.1	<p>MDFLNSSDQN LTSEELNRM PSKILVSLTL SGLALMTTII NSLVIAAIIV TRKLHPHANY P LYRAITDAVE YARKRTPKHA GIMITIVWII SVFISMPPLF WRHQGTSRDD ECIKHDHIV STIYSTFGAF YIPLALIL YKIYRAAKT LYHKRQASRI AKEEVNGQVL LESGEKSTKS VSTSYVLEKS LSDPSTDFDK IHSTVRSLS EFKHEKSWRR QKISGTREK AATLGLILG AFVICWLPFF VKELVVNVCD KCKISEMSN FLAWLGYLNS LINPLIYTFI NEDFKKAFQK LVRRC</p> <p>gaattcgggt gagccagctc cgggagaaca gcatgtacac cagcctcagt gttacagagt A gtgggtacat caaggtgaat ggtgagcaga aactataaacc tgttagtctc tctacacctc atctgctaca agttctggct tagacatgga tattctttgt gaagaaaaata cttctttgag ctcaactacg aactccctaa tgcaattaaa tgatgacacc aggcctcaca gtaatgactt taactctgga gaagtaaca cttctgatgc attaaactgg acagtcgact ctgaaaaatcg aaccacactt tctgtggaag ggtgcctctc accgtcgtgt cctcctctac ttcactctca ggaaaaaaac tggctgctct tactgacagc cgtagtgtatt attctaacta ttgctggaaa catactcgtc atcatggcag tgcctctaga gaaaaagctg cagaatgcca ccaactattt cctgatgtca cttgccatag ctgatattgt gctgggtttc cttgtcatgc ccgtgtccat gttaaccatc ctgtatgggt accgtgggccc tctgccagc agcctttgtg cagtctggat ttacctggac gtgctcttct ccacggcctc catcatgcac cttcgtgcca tctcgtgga ccgctacgtc gccatccaga atcccatcca ccacagccgc ttcaactcca gaactaaggc</p>	Homo sapiens
11	132	5-HT2A Receptor	NM_000621	<p>gaattcgggt gagccagctc cgggagaaca gcatgtacac cagcctcagt gttacagagt A gtgggtacat caaggtgaat ggtgagcaga aactataaacc tgttagtctc tctacacctc atctgctaca agttctggct tagacatgga tattctttgt gaagaaaaata cttctttgag ctcaactacg aactccctaa tgcaattaaa tgatgacacc aggcctcaca gtaatgactt taactctgga gaagtaaca cttctgatgc attaaactgg acagtcgact ctgaaaaatcg aaccacactt tctgtggaag ggtgcctctc accgtcgtgt cctcctctac ttcactctca ggaaaaaaac tggctgctct tactgacagc cgtagtgtatt attctaacta ttgctggaaa catactcgtc atcatggcag tgcctctaga gaaaaagctg cagaatgcca ccaactattt cctgatgtca cttgccatag ctgatattgt gctgggtttc cttgtcatgc ccgtgtccat gttaaccatc ctgtatgggt accgtgggccc tctgccagc agcctttgtg cagtctggat ttacctggac gtgctcttct ccacggcctc catcatgcac cttcgtgcca tctcgtgga ccgctacgtc gccatccaga atcccatcca ccacagccgc ttcaactcca gaactaaggc</p>	Homo sapiens

attttgaaa atcattgctg tttggaccat atcagtaggt atatccatgc caataccagt
 ctttgggcta caggacgatt cgaaggtctt taaggagggt agttgcttac tcgccgatga
 taactttgtc ctgacgggt cttttgtgtc atttttcatt ccttaacca tcatggtgat
 cactacttt ctaactatca agtcactcca gaaagaagct actttgtgtg taagtgatct
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 gcagtccatc agcaatgagc aaaaggcatg caaggtctg ggcacgtctt tcttctgtt
 tgtgtgatg tgggtgacct tcttcatcac aaacatcatg gccgtcatct gcaaaagatc
 ctgcaatgag gatgtcatg gggccctgtc caatgtgttt gtttggatcg gttatctctc
 ttcagcagtc aaccactag tctacacact gttcaacaag acctataggt cagccttttc
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 aatgatatgt ctttaaaatg attcactttt attgtataat tatgaagccc taagtaaatc
 taaattaaat tctattttca agtggaaacc tgcgtgctat taaatagtga aaattttatt
 gatgagttg gttacattt gccgtaaaata aaaaacttact atggtatata ttttgaagg
 gaataaatg gctctttaa aattatctt aaaaacttact atggtatata ttttgaagg
 agaaaaaaa aaagccacta aggtcagtg tataaaatct gtattgctaa gataattaaa
 tgaataactt gacaaacttt ttcatagata ccattttgaa atttcacaa gtttgcgtgc
 atttgctgca tttcaagtta attctcagaa gtgaaaaaga cttcaaatgt tattcaataa
 ctattgctgc tttctcttct acttcttctg ctttactctg aatttccagt gtggtcttgt
 ttaataattg ttoctctagg taaactagca aaaggatgat ttaacattac caaatgcctt
 tctagcaatt gcttctctaa aacagcacta tcgaggtatt tggtaacttg ctgtgaaatg
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 ttgaggatga actcagggtt cgggctactg acagtggtag agtcctagga catctctgta
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 tttatactat ttattaaaa cactctgctt ggttccacaa tcatctattg agtgtacatt
 tatgtgtgaa gcaaatctt agatatgaga aatataaaaa taattaaaaac aaaaatcctg
 ccttcaaacg aaatggctcg gccaggcagc gaggctctg catgtaatcc tagcactttg
 ggaggctgag atgggaggat cacttgaggc caagagcttg agaccaactt gggtaacaaa
 gtgagacctc cctgtctcta caaaaaaat caaaaaatta tctgatcctt gtggcacaca
 actgtgttcc cagctacagg ggaggctgag acgcaaggat cacttgagcc cagaagctca
 aggtcagat gagccaaagt cacaccactg ccatttctc ctgggcaaca gagtgaagcc
 ctatcacccc gaattc

13	133	5-HT2B Receptor	NM_000867	<p>MLLGLVMPV SMLTILYGYR WPLPSKLCV WYLDVLFST ASIMHLCAIS IDRYVAIQNP IHHSRNSRT KAFKIIIAVW TISVGISMPI PVFGLQDDSK VFKEGSCILA DDNEVLIGSF VSFFIPLTIM VITYFLTIS LQKEATLCVS DLFWMKLAS SFELPQSSLS SEKLFQRSIH REPGSYTGRR TMOQISNEQK ACKVLGIVFF LFVWMCPPFF ITNINAVICK ESCNEDVIGA LLNVFWIGY LSSAVNPLVY TLFNKTYRSA FSRYIQCYK ENKKPLQLIL VNTIPALAYK SSQLQMGQKK NSKQDAKTTD NDCSMVALGK QHSEASKDN SDGVNEKVC V</p> <p>tactaaccat gctgaccact gttcggaacg ggattgaatc acagaaaaac agcaaatggc A tctctcttac agagtgtctg aacttcaaaag cacaattcct gagcacattt tgcagagcac ctttgttcac gttatctctt ctaactggtc tgaattacag acagaaatcaa taccagagga aatgaaacag attgttgagg aacagggaaa taaactgcac tgggcagctc tcttgatact catggtgata ataccacaa ttggtggaaa tacccttgtt attctggctg tttcactgga gaagaagctg cagtatgcta ctaattactt tctaattgctc ttggcgggtg ctgatttgct ggttggttg tttgtgatgc caattgccct attgacaata atgtttgagg ctatgtggcc cttcccaact gttctatgic ctgcttggtt atttcttgac gttctctttt caaccgcac catcatgcat ctctgtgcca tttcagtggg tcgttacata gccatcaaaa agccaatcca ggccaatcaa tataactcac tttcagtgga attcatcaag attacagtgg tggaggttaat ttcaataggc attgccattc cagtccttat taaagggata gagactgatg tggacaaccc aaacaatatc acttgtgtgc tgacaaaagg acgttttggc gatttcacgc tctttggctc actggctgac ttcttcacac acttagtcaa aaacaagcca cctcaacgcc taacatgggt tgctttacag aagaaggctt acttagtcaa aaacacctgc tcgtcacccg aaaagggtggc gactgtgtct acagttttcc aaagggatga tctgcccaac tcaggtgatg aaacacttat aatgctggat ggttctcgaa aggacaaggc agtgcagacc atttccaacg aacagagagc gcgaagaaca tccacaattg gaaaaagtc agtgcagacc atttccaacg aacagagagc ctcaaggctc ctagggttg ttgttttctt ctttttgctt atgtggtgc cttctttat tacaatatata actttagttt tatgtgattc ctgtaaccaa actactctcc aatgctctct ggagatatatt gtgtggatag gctatgtttc ctgagagagt aatcctttgg tctacacct cttcaataag acatttcggg atgcatttgg ccgataatc accgtgcaat accgggccc aaagtcagta aaaactctca gaaaacgctc cagtaagatc tacttccgga atccaatggc agagaactct aagtttttca agaaacatgg aattcgaaat gggattaacc ctgccatgta ccagagtcca atgaggctcc gaagttcaac cattcagttc tcatcaatca ttctactaga tacgcttctc ctcaactgaa atgaaggatg caaaactgaa gagcaagtta gttatgtata gcagaactgg cagttgtcat caaacataat gatgagtaag atgatgaatg agatgtaaat gtgcccagaa tatattatat aaagaatttt atgtcatata tcaaatcatc tctttaacct aagatgtaag tattaagaat atctaatttt cctaatttgg caaagattat tccatgagga aaataatttt atatagtac aaatgaaaaa atccagcac tctggttaaa ttttaaggta ttcgaatgaa ataaagtcaa atcaataaat ttcaggcttt aaaaaaaa</p> <p>ILMVIPTIG GNTLVILAVS LEKKLQYATN YFLMSLAVAD LLVGLFVMPI ALLTIMFEAM WPLPLVLCPA WFLDVLFTST QSTIPEHILQ STFVHVISSN VDRYIAIKKP IQANQYNSRA TAFIKITVW LISIGIAIPV PIKGIETDND NPNNITCVLT KERFGDFMLF GSLAAFTPL AIMIVTYFLT IHALQKKAYL VKNKPPQRLT WLTVSTVFQR DETPCSSPEK VAMLDGSRKD KALPNSGDET</p>	Homo sapiens
14	133	5-HT2B Receptor	NP_000858.1	<p>GNKLHWAALL P</p>	Homo sapiens

15	134	5-HT2C Receptor	nm_000868	LMRRTSTIGK KSVQTSINEQ RASKVLGIVF FLFLMWCPE FITNITLVL DSCNQTTLQM LLEIFVWIGY VSSGVNPLVY TLFNKTFRDA FGRIYTCNRY ATKSVKTLRK RSSKIYFRNP MAENSKFFKK HGIRNGINPA MYQSPMLRS STIQSSSIIL LDILLITENE GDKTEEQVSY V	Homo sapiens
				accgcgcga gtaggcgcgt ctggtgcttg cggaggacgc ttcttcctc agatgcaccg A atcttccga tactgcctt ggagcgcta gattgctagc cttggctgct ccattggcct gccttgcccc ttacctgcg attgcatatg aactcttctt ctgtctgtac atcgttgtcg tcggagtcgt cgcgctgc cgtgcgctcg gtagcgcgt tagtgacag atgctggagg tagttagtta gggcccaacg aagaagaaag gtagatagc gagccaaacc tagccggggg tggtcagtta ctaagctaga gtagatagc gtagcgaata tagcgcgggg gcgcacggtc acccaaggga ggtcgactcg cggcgcttc ctatcgccg gagtccctc cattcctctc cctccgcga ggcgcgaggt tgcggcgccg agcgacgcgc agtcagcgc accgactgcc cggggtccg ctggcgatt gcagcgaggt ccgtttctcg tctagctgcc gccgcggcga cgcgtgctg gtcttctcc cggacgctag tgggttatca gctaacaccc gcgagcatct ataatctagg ccaactgacg ccaacttca aaaaacta aggatgata tgatgaacct agcctgttaa ttctgtctt ccaattttaa actttggttg cttagactg aagcaatcat ggtgaacctg agaatgcgg tgcattcatt ccttgtgcac ctaattggcc tattggtttg gcaatgtgat atttctgtga gcttcaaat tccagacgg ctccttctg tcaataacct cgatgggtga cgttcaaat tccagacgg ctccttctg atcatggcag tttcaatcgt catcataata atcatgaca ccaatgcca ccaattactt ctatgcttc ctgatatgct agtgggacta ctgtctatg cctgtctct cctggaatc ctttatgatt atgtctggcc actacctaga ttttctgct cctgtctggt ttcttttagat gttttattt caacagcgtc catcatgcac ctctgcgta tctgtctgga tctgtatga gcaatagta atcctattga gcatagccgt ttcaattcgc ggaactagg catcatgaa attgctatg tttgggcaat ttctataggt gtatcagttc ctatccctgt gattggactg agggacgaag aaaagggtgt cgtgaacaa acgacgtgcg tgcctcaacg cccaaattc gttcttattg ggtccttcgt agctttcttc ataccgtga cgtattatggt gattacgtat tgcctgacca tctacgttct gcgcgacaa gctttgatgt tactgacgg ccacaccgag gaaccgctg gactaagtct ggatttctcg aagtgcgca agaggaatac ggcgaggaa gagaactctg caaaccttaa ccaagaccag aacgcacgc gaagaaagaa agctctcgaa attgtttct gcaccatga ggtatcaac aatgaaagaa agctctcgaa agctctggtt gttcttctg ttgtgtttct gatcatgttg tgccatttt tcataccac atcttctggt tggattggct agaaagtcctg taacaaaag ctcctggtaa agcttctgaa tcttctgtct tggattggct atgtttgttc aggaatcaat cctctgggtg tgaattata atactctgt caacaaaatt taccgaagg cattctccaa ctatttgcgt tgaattata aggttagaa aaagcctcct gtcaggcaga ttccaaagt tgcgcacct gctttgtctg gtagggagct taatgttaac atttatcgcc ataccaatga accggtgat gagaaagca gtgacaatga gcccggtata gagatgcaag ttgagaattt agagttacca gtaaatcct ccagtgtggt tagcgaagg attagcagtg tgtgagaaa aacagcacag tcttttcta cgggtacaag tacatatga ggaattttt cttctttaat ttttctgtg gtcttaacta atgtaaatat tgctgtctga aaaagtgtt	

ttacatatag ctttgcaacc ttgtacttta caatcatgcc tacattagtg agatttaggg
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ttaaggacag tgttcaaat ctgatttata caacaagcaa actgaaatta gtgttttcat
tctgttctct agtaaatcc taattctatg attaaactgg gaaatgagat ccagagatta
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tacctctgtc tataggactt aatttagcag tccatttttg agtaaaactt gtattggag
tatagattgt agaaacttg gaagttttac ttgatttaag actacagaat tgggccctta
gaatgtgaaa aaaaaaagta attaaaaaga cactttttacc gaactcggga ttacagaaac
acggagtctc catttgatt ttaacaaaaa tttatgtcat tttcagatcc ttccaactc
tctagtgcag gaaaaggctg cagctaattt gtgaaggtgg caagctcttc attgcactgc
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ggccatcatt tcatctgttg gctgtctgct ctctaagaat tcagtagcat ttaaatagtt
tctaaacat gaaaagtgtt caagcattgc taaagtcagg ccattcagtc tatgtgtgt
gcagagtata caagtgttc tagtaacagt atttcatac gtgcccattt cacacaactg
tggataaatt ttggaagaat tcatgatgct agttcttacg cttagacagt acttacacac
ctgagaatgt gctctcagt atcttaaat tggtaataga aaaaactgaa tttctaaaaac
ccttggctcg tgttctaac acacagtata gataaatcca atagtctgcc acaagggcag
tggagagagt gctgtatttg aggaactca tacagtctct atttgattg caacactggc
caaacatcag tcatttgctt gagcatgcc aatatataa tgaagtcga gtctacctgc
cttgcctgtt aggtctgttg aagtgcagt taaaaaat atatgaagca gaatgagatg
atttaattct taccgaatg aaaaaggctg aagaacaca gcatgcattt agcatgagtt
ctgcacatc agatgggtgc ctgcatgtat gccatgtatg ttgcatgaat ccatcgattt
gtattaatgt agggcagaat agctgataga agaaggactg aaaaaatcc ttcagcaatc
cttaaaaaa ccatgcattc agatctgaag ggaagctca tagtgtagt gttgaaaaa actggaaaaa
tctgatttct gaactatcag ggaagctca tactagcaat agttgaatg ataatagtc acagcacatt
aaatcacaga tttccaaaag tcaagtatga gtacttaata gtaccaacc tggtaattat
tgtaaatgat tcttgttca tcaagtatga tgcagtttgg tatgaacaa atatactcat
cctcaagtgt tgtgtattc gtaagtctg atctacaac ttttataaat gttttaaaga
ttggatataa atcttacct tcaatgttaa tttaccatca acaaatcat tttgatgtat
agtccatgtg ataattgtaa aggtgatgaa tttaccatca acaaatcat tttttctgt
tattatata gtatatctgt gtaagacacg tgcaacagag tgccttatat tattttctgt
aattctctc ctttgtcaaa tggattttt ttggaagtgt tgcatttctc

16	134	5-HT2C Receptor	NP_000859.1	<p>ctaatttcctg tatgttatcc actacaggtt ttatgagact tcttattaat ttattaaatt tattaaatgt tgaataaaaa aaaaaaaa wqcdsvspv aaivtdifnt sdggrkfpd gvqnpalsi p mvnlrnvhs flvhlgliv wqcdsvspv aaivtdifnt sdggrkfpd gvqnpalsi p viiiimtg nilvimaavm ekklhnatny flmslaiadm lvglvmppls llailydyvw plprylcpvw isldvlfsta simhlcalsl dryvaurnpi ehrsnsrpk aimkiaivwa isigsvpih vlgldvlfsta simhlcalsl dryvaurnpi ehrsnsrpk aimkiaivwa lrrqalmlh ghtheppgls ldfkccckrn taeeensanp nqdqnarrk kkerrprgtr qainnerkas kvlgivffve lnmwcpffit nilsvlcke CNQKMEKLL NFEVWIGYVC SGINPLVYTL FNKIYRRAFS NYLRNYKVE KKPPVRQIPR VAATALS GRE LNVNIYRHTN EPVIEKASDN EPGIEMQVEN LELPVPSSV VSEIRISSV</p>	Homo sapiens
17	136	5-HT4 Receptor	NM_000870	<p>cgtgtcttat ttcctgtaat ggacaaactt gatgctaag tgagttctga ggagggtttc A gggtcagtg agaagtggt gctgtcacg tttctctga cgtgtatcct gatggccatc ttgggaacc tgcgtgtgat ggtggctgtg tgctgggaca ggcagctcag gaaataaaa acaaattatt tcatgtatc tctgtcttt gcggatctgc tgggttcggt gctggtgatg cccttgggtg ccattgagct ggttcaagac atctgattt atggggaggt gtttctctt gttcggacat ctctggact cctgtcacac acggcatcga ttttccacct gtgctgcatt tctctggata ggtattacgc catctgctgc cagcctttgg tctataggaa caagatgacc cctctgcgca tgcattaat gctgggagc tgcgtgggtca tccccacgtt tattctttt ttccctataa tgcaaggctg gaataacatt ggcataatg attgataga aaagaggaag ttcaaccaga acttaactc tacgtactgt gcttctcatg tcaacaagcc ctacgccatc acctgtctg tgggtgacct ctacatccca tttctctca tgggtctggc ctattaccgc atctatgtca cagctaagga gcatgccat cagatccaga tgttacaacg ggcaggagcc tctccgaga gcaggcctca gtcggcagc cagcatagca ctcatcgat gaggacagag accaaagcag ccaagaccct gtgcatac atgggttgct tctgctctg ctgggcacca tctcttgta ccaatattgt ggatccttc atagactaca ctgtccctgg gcagggtgtg actgcttcc tctggctcg ctatatcaat tccgggttga accctttct ctacgccttc tgaataagt cttttagacg tgcctctc cctgtgatga tgagcgctac cgaagacct ccattctgg ccagactgtc cctgttcaa ccaaacct taatggatcc acacatgtac taaggatgc agtgagtgt ggtggccagt gggagagta gtgtacccg ccagcaact ctcctttgtt ggtgctcag cccagtgaca cttaggcccc tgggacaatg acccagaaga cagccatgcc tccgaagag ggcagggtcc taagctgctg ctgtgctgcg actgcacccg gcattctctt cactgagcg tttccgtccg ccagtgagc aaccgggtgc tcgtggtg</p>	Homo sapiens
18	136	5-HT4 Receptor	NP_000861.1	<p>MDKLDANVSS EEGFGSVEKV VLTFLSTVI LMAILGNLV MVAVCWDRQL RKIKTNYFIV P SLAFADLLVS VLMPEGAIE LVQDIWIYGE VFCLVRS LD VLTTSIFH LCCISLDRIY AICCPQLVYR NKMTPLRIAL MLGGCWVPT FISFLPMQG WNNIGIIDLI EKRFENQNSN STYCVFMWK PYAITCSVA FYIPFLLMVL AYYRIYVTA EHAHQIQMLQ RAGASSESRP QSADQHSRTH MRTEKAAKT LCIIMGCFCI CWAPFVTNI VDPFIDYTP GQVWTAFLWL GYINSGLNPF LYAFLNKSFR RAFLIILCCD DERIRRSIL GQTVPCSTTT INGTHVLRLD AVECGGQWES QCHPATSP L VAAQPSDT</p>	Homo sapiens
19	138	5-HT6	NM_000871	<p>cccagagcg cccattcacc cccctcacc acctccccg gtccccactt cccgcactc A</p>	Homo

Receptor

sapiens

tgacccggcc ggaagccccc cccctatctt gccgcccggc cctccagggg ggctctgctc
 ccacccagg gagccatcc gacctctgt tgaattcccg ccgcttccct caggggccc
 ggctcatcg gtgcccctcc ccaaaacttc aaccggtttg ctccaggagt tcttgccca
 tccccagggt cgcccaata gccacactgt gtctctctgt agtcgcccgc cctgacctc
 gcgcgaccca ggcgcccgcg ccatgtcccc cctccggggg gcgtgggtgag
 tcgcggtctg ttctcacgga cgggtcccgt ccagctctgg gtccaccctg gctccatct
 gcttccgcg caccctatca ctccttgcc gtccaccctg gctccatctg gctccagagc
 cgggcccac cgccaatagc accccggcct gggggggcag gccgcccgtg gccccggggg
 gcagcggtg ggtggcgcc gcgctgtggt tgggtcatcg gctgacggcg gcggccaaact
 cgctgctgat cgcgctcatc tgcactcagc cgcgctgctg caacacgtcc aacttcttc
 tgggtgctgt cttcacgtct gacctgatgg tggggctggt ggtgatgccc cgggccatgc
 tgaacgcgt gtacggggcg ggtgtgctgg cgcgcccct ctgcctgctc tggaccgct
 tcgacgtgat gtgctgcagc gctccatcc tcaacctctg cctcatcagc ctggaccgct
 acctgctcat cctctgcgg ctgcgtaca agctgcgcat gacgcccctg cgtgcccgtg
 cctagtctt gggcgccctg agcctgcgg ctctgcctc ctccctgccc cgtgctgctg
 gctggacaga gctggggcac gaacggccac cgtgcccctg ccagtcccgc ctgctggcca
 gccctgcttt tgccttctgt gctgctggcc tcaacttctt cctgcccctg ggtgcccata
 gcttcacctc ctgcaggatc ctgctagtgt cccgcaagca ggcctgtcag gtggccctcc
 tcaccacgg catggccagt caggccctgg agacgtgca ggtgcccag accccacgccc
 cagggttgga gtctgctgac agcaggcgtc tagccacgaa gcacagcagg aaggccctga
 agccagcct gacgtgggc atcctgctgt gctgttctt tgtgacctgg ttgcccctct
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 gggactcaa gcggcgctg ggcaggttcc tgccatgtcc acgtgtccc cgggagcggc
 agccagcct ggcctgcga tcactgcga cctctcacag cggcccccg cccggcctta
 gcctacagca ggtgctgccc ctgcccctgc cgcgggactc agattcggac tcagacgcag
 gctcaggcgg ctccctgggc ctgcggctca cggcccagct gctgcttctt ggcgaggcca
 cccaggaccc cccgctgccc accaggggcg ctgcccggct caatttctt aacatcgacc
 ccgcgagcc cagctgctgg ccgcatccac ttggcatccc caggaactga cccgggcttg
 gggctggcca atggggagct ggaattgagca gaacccagac cctgagctct tgggcccagct
 cttggctaag accaggaggg tgaagtctc ctagaagccc tctgagctcc agagggtgc
 gcagagctga cccctgctg ccatctccag gcccttacc tgcagggata atagctgact
 caga

20 138

5-HT6

Receptor

NP_000862.1

P

Homo

sapiens

MVPEPGPTAN STPAWGAGPP SAPGGGWA AALCVVIALT AAANSLIAL ICTQALRNT
 SNFFLVSLFT SLMVGLVVM PPAMNLYG RWVLARGLCL LMTAFDVMCC SASILNLCIL
 SLDRYLLILS PLYKLRMTPL LRALALVIGA WSLAALASFL PLLLGHHEL HARPPVPGQC
 RLLASLPFVL VASGLTFFLP SGAICFTYCR ILLAARKQAV QVASLTGMA SQASETLQVP
 RTPRPGVESA DSRRLATKHS RKALKASLTL GILLGMFFVT WLPFFVANIV QAVCDCISPG
 LFDVLTWLG Y CNSTMNPIY PLFMRDEKRA LGRFLPCPRC PRERQASLAS PSLRTSHSGP
 RPLSLQQVL PLPLPPDSDS DSDAGSGSS GLRLTAQLLL PGEATQDPPL PTRAAAVNF
 FNIDPAEPEL RPHPLGIPTN

21	139	5-HT7 Receptor	NM_000872	<p>ccatggggcag cggcacacgg cggcgcgatg atggacgtta acagcagcgg ccgcccggac A</p> <p>ctctacgggc acctccgctc ttctctctg ccagaagtgg ggcggggct gcccgacttg</p> <p>agccccgacg gtggcgccga ccgggtcgcg ggtctctggg cgcgcacct gctgagcgag</p> <p>gtgacagcca gcccgcgcc cactgggac gcgccccggg acaatgcctc cggctgtggg</p> <p>gaacagatca actacggcg agtcgagaaa gtgtgatcg gctccatcct gacgctcatc</p> <p>acgctgctga cgatcgcggg caactgcctg gtgtgatcg cgtgtgctt cgtcaagaag</p> <p>ctccgccagc cctccaaacta cctgatctg tccctggcg tggcgacct ctcggtggct</p> <p>gtggcggtca tgccttctg cagcgtcacc gacctcatg ggggcaagtg gatctttgga</p> <p>cacttttct gtaatgtct catcgccatg gacgtcatgt gctgcaagg ctcgacatcg</p> <p>acctgtgcg tgatcagcat tgacaggtac cttgggatca caaggcccc cacataacct</p> <p>gtgaggcaga atgggaaatg catggcgaag atgattctt cgtctggtt tctctccgc</p> <p>tccatcacct tacctccact ctttgatgg gctcagaatg taaatgatga taagggtg</p> <p>ttgatcagcc aggaacttgg ctatacgatt tactctacc cagtggcatt ttatatccc</p> <p>atgtccgtca tgccttctat gtactaccag attacaagg ctgccaggaa gagtctgcc</p> <p>aaacacaaat tctctggctt cctcgatg gagccagaca gctcatcg cctgaatggc</p> <p>atagtgaagc tccagaagga ggtggaagag tgtgcaaac ttctgagact cctcaagcat</p> <p>gaaaggaaaa acatctccat ctttaagcga gaacagaaa cagccaccac cctggggatc</p> <p>atcgtcgggg cctttaccgt gtgctggctg ccattttcc tctctcgac agccagaccc</p> <p>ttcatctgtg gcaactctct cattaacct cttatatacg cttcttcaa ccgggacctg</p> <p>ctaggctatg caaactctct atcgagcct gctccagtg cagtaccgga atatcaacc gaagctctca</p> <p>aggaccacct atcgagcct cctgaagc cctgaagctt gctgagagg cagagagacc tgagttgtg</p> <p>gctgacggca tgcataagc cctgaagcct tagaaaaaa ggtcatgatt catgattgaa agcagaacaa</p> <p>ctacaaaaatg ctgactactg tagaaaaaa ggtcatgatt catgattgaa agcagaacaa</p> <p>tgag</p>	Homo sapiens
22	139	5-HT7 Receptor	NP_000863.1	<p>MDPVNSSGRP DLYGHLRSFL LPEVGRGLPD LSPDGGADPV AGSWAPHLLS EVTASPAPTW P</p> <p>DAPPDNASGC GEQINYGRVE KVVIGSILT ITLLTIAGNC LVVISVCFVK KLRQPSNYLI</p> <p>VSLALADLSV AVAVMPFVSU TDLIGGKWIF GHFFCNVFA MDVMCCTASI MTLCVISIDR</p> <p>YLGITRPLTY PVRQNGKCMK KMLSVWLLS ASITLPPFLG WAQNVNDDKV CLISQDFGYT</p> <p>IYSTAVAFYI PMSVLMFYI QIYKAARKSA AKHKFPGFPR VEPDSVIALN GIVKLOKEVE</p> <p>ECANLSRLK HERKNISIFK REQKAATLG IIVGAFTVCW LPFFLLSTAR PFICGTSCSC</p> <p>IPLWVERTFL WLGYANSLIN PFYAFENRD LRTTYRSLQ CQYRNINRKL SAAGWHEALK</p> <p>LAERPERPEF VLQADYCRK KGHDS</p> <p>atgagtgta gaagtgtgaa ggggtcctgt tctgaatccc agagcctcct ctcctctgt A</p> <p>gaggtggca ggtgaggaag ggttaacct cactggaagg aatccctgga gctagcggt</p> <p>gctgaaggcg tcgaggtgtg ggggacctg gacagaacag tcaggcagcc gggagctctg</p> <p>ccagctttgg tgaccttgg ccgggtggg agcgtcgcg cgggagccgg aggactatga</p> <p>gctgcccgc gttgtccaga gccagccca gccctacgc cgcggccccg agctctgtc</p> <p>cctggaaactt tgggcaactg cctgtggacc cctgcccggc agcaggcagg atggtgctt</p> <p>cctgtgccc cttgtgccc gctgtgtgat gtgcccagcc tgtgcccgc atgcccctt</p> <p>ccatctcagc ttccaggcc gctacatcg gctcaggtt gctcagcc cttgctctg</p> <p>tgcccgggaa cgtgctgtg atctggcgcg tgaaggtgaa ccaggcgtg cgggatgcca</p>	Homo sapiens
23	272	Adenosine A1 Receptor	NM_000674		Homo sapiens

ccttctgctt catcgtgtcg ctggcggtgg ctgatgtggc cgtgggtgccc ctggtcatcc
 ccctcgccat cctcatcaac attgggccac agactactt ccacacctgc ctcattggtt
 accgtccggt cctcatcctc acccagagct ccactctggc cctgctggca attgctgtgg
 cgccgtggc catagccggc tgcctctcc ggtacaagat ggtggtgacc ccccgagg
 ttggctggaa caactcagct gcggtggag ggcctctggc agccaacggc agcctatgt
 agccctgat caagtgcgag ttcgagaagg tccatcagct ggagtacatg gtcacttca
 actctttgt gtgggtgctg ccccgcttc tccatcagct cctcatctac ctgaggtct
 tctacctaact ccgcaagcag ctcaacaaga aggtgtcggc ctcctccggc gaccgcaga
 agtactatgg gaaggagctg aagatcgcca agtgcctggc cctcatcctc tctctctt
 cctcagctg gctgcctttg cacatcctca actgcatcac cctctctgc cgtctctg
 caaagccag cctcctacc tacattgcca tcttctctac gcacggcaac tccgcatga
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 atgaccattt ccgctgccag cctgcacct ccattgacca ggtactccca gaagagaggc
 ctgatgacta gaccccgct tccgctccca ccagccaca tccagtggg tctcagtcca
 gtctcacat gcccgctgc ccagggtct cctgagctg ccccgagctg ggtgttggc
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 gttggtggtg cagccccagg accaagctta aggagagag agcatctgct ctgagacgga
 tggaaaggaga gaggttgagg atgcactggc ctgttctgta ggagagactg gccagaggca
 gctaaggggc aggaatcaag gactctcgt tcccacctct gaggactctg gaccacaggc
 cataccaggt gtaggggtgc ctgtctctcct tgcctgggc cagccaggga ttgtacgtgg
 gagaggcaga aagggtaggt tcagtaata tttctgatga ttgtctggag tgcgtgctcc
 acgccccggg gagtgcgctt ggtgcggtag gtgctggcct caaacagcca cgaggtggt
 gctctgagcc ctccttctg cctgagctt tccggggagg agcctggagt gtaattacct
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 cccatctctg ctgcttctg gctgatgga gaggagaaca ctgacatgc caactcggga
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 ctgtaggcgc cctgggggtg ggtttagcag gctgcagcag gcagaggagg agtaccctcc
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 gcccctgtgt gggaggggcga ggcgggggat cctggagccc ctgtgtcggg gggcagaggga
 ggggaggtgg ccgtcggtt accttctgaa catgagtgc aactccagg cttgcttcca
 agccctccc tctgttgaa attgggtgt cctgggctcc caaggaggc ccatgtgact
 aataaaaaac tggaaacct

24 Adenosine A1 NP_000665.1 MPPSISAFQA AVIGIEVLIA LVSVPGNVLV IWAQKVNQAL RDATECFIVS LAVADVAVGA P Homo
 272

26	Adenosine A2a Receptor	NP_000666.2	273	<p> agtgacaaaag ctgggatcaa ggatagggag ttgtaacaga gcagtggccag agcatggggc caggtccag gggagaggtt ggggctggca ggcactggc atgtgctgag tagcgagag ctaccagt agaggccttg tctaactgcc ttctcttcta aagggaatgt tttttctga gataaataa aaacgagcca catcgtgttt taagcttgc caaatgaaaa aaaaaaaa aaa </p>	Homo sapiens
27	Adenosine A2b Receptor	NM_000676	274	<p> MPIMGSSVYI TVELAIAVLA ILGNVILVCWA VMLNSNLQNV TNYFVSLAA ADIAVGVLAI P PFAITISTGF CAACHGCLFI ACFLVLVTQS SIFSLAIAI DRYIAIRIPL RYNGLVITGR AKGIIAICWV LSFAIGLTPM LGWNNGQPK EGNHSGQCG EGQVACLFE VPMNMYVF NFEACVLVPL LMLGVYLR FLAARQLKQ MESQLPGER ARSTLQKEVH AAKSLAIIVG LEALCWLP LH IINCFTFCP DCSHAPLWLM YLAIVLSHTN SVNPFYIY RIREFRQTFR KIIRSHVLRQ QEPFKAAGTS ARVLAHAGSD GEQVSLRLNG HPPGWANGS APHPPERENG YALGLVSGGS AQESQNTGL PDVELLSHEL KGVCPEPPGL DDPLAQDGAG VS gggcaatttg ttagttatcc gccgccacca agacgcgcca cggcgcttg accggagggg A cccgcgcgg gcgcgaactt tgggctcggc cagtggggtg gtgctccgcc cagcccgaga cgggcggcg cgcgggccaa tgggtgcgc cttctggccg cggggggccc cgaccgtgg gtcccgcca ccagcgccc ccagtcgcgg cgggtctcac ggggtgccc ctcgccggc ggcgctcgg gggtctatg ccagtcgcgg cggggggcca gctggcccgg ccatgtctgt ggagacacag gacgcgctg tagggggcg cggggggcca gctggcccgg cctgtctgtt ttcgggtggc gggaacgtg ctggtgtgcg acgtggcgt ggagctgttc atcgccgcgc ctcctgcaga cgcgccacca ctacttctg gtgtccctg ccgcggtgg cagcgcgaa actctgcga gctctcttcg cctccctt tgccatcac atcagcctg ctgcggcga cgtggcgtg gggctcttcg cctccctt cctcgtctg ctctgtcgc gtgtcacgc gctctgcac tgaattctac ggtgcctct cctcgtctg atacctggc atctgtgtc agagctccat cttcagcctt ctggcgtgg gctgcagcag cccagcagc aggggtcatt gctgtcctt cgctcagga taaaagtgt gtcacgggga cccagcagc aggggtcatt gctgtcctt ggttccttg ctttggcatc gattgactc cctcgtggc gattgactc gggagacag aaagacagt ccaccaaaa ctgcacagaa cctcgggatg gaaccacgaa tgaagctgc tgccttgtga agtctctt tgagaatgtg gtcccatga gctacatggt atattcaat tctcttgggt gtgtctgcc cccactgctt ataagctg tgaatctat taagatctt ctggtggcct gcaggcagct tcagcgact gagctgatg accactcag gaccacctc cagcgggaga tccatgcag caagtactg gccatgatt ggggatttt tgcctgtgc tgggttacctg tgcattgtg taactgtgc actcttttc agccagctca ggtataaat aagcccaagt gggcaatgaa tatggcatt cttctgtcac atgcaattc agtgtcaat cccattgtct atgcttaccg gaaccgagac ttcgctaca ctttcacaa aattatctcc aggtatctt tctgccaagc agatgtcaag agtgggaatg gtcaggctgg ggtacagcct gctctcgtg tgggctatg atctaggctc tgcctcttc caggagaaga tacaatcca caagaacaa agagacacg gctggtttt atgtgaaa atagctacac ctcacaaga aatggactgc ctctcttgag cacttccctg gagtaccac gtatctagct aatgtatg tgcagtagt aggtcccaag gattgacaaa tatatttatg atctattcag ctgtttttac tgtgtggatt atgccaacag cttgaatgga ttctaacaga cttttttgt ttaaaagtc tgccttgtt atggtggaaa attactgaaa ctattttact gtgaacag gtgaactatt ataatgcaa tacttttaa cttagaggca atgaaaaat aaaagtgtac tgaactaaa atg </p>	Homo sapiens

28	274	Adenosine A2b Receptor	NP_000667.1	MLLETQDALY VAELELVIAAL SVAGNVLVCA AVGTANTLQQT PTNVFLVSLA AADVAVGLFA P IPFAITISLG FCTDFYGCLE LACFVLVLTQ SSIFSLAVA VDRYLAICVP LRYKSLVTGT RARGVIAVLW VLAFGIGLTP FLGWNKSDSA TNNCTEPWDG TTNESCCLVK CLFENVVPM YMYVNFEGC VLPPLIMLV IYIKIFLVAC ROLQRTLEMD HSRTLOREI HAAKSLAMIV GIFALCWLPV HAVNCVTLFQ PAQGNKPKW AMNMAILSH ANSVNPIVY AYRNRDRFYT FHKIISRYLL CQADVKSNG QAGVQPALGV GL	Homo sapiens
29	275	Adenosine A3 Receptor	NM_000677	atcttgcctg caaaggctgg gttatcgctg tgctcagcaa agcgtcaact cgtgcaagaa A cttagcagga atagttctgg ctaaggttag gaggctgcca ccaagatctc ttttttggctt ctctgcttct cccgtttgcc tcttatcat gagatctttt tgctaaagctg gcagaaagat tgcatagtcg gtgcttccag ctctgctccc acctgacct gcactgtcct ctggtccctg aatgaatgaa ctctgatacc caatcttgct tcgagccttc tctatgccac tcatggctcc tcttctgctc tttccatctt tttgctgaga gttctgagct ctgtacttcc tcttggtcca tctcacttcc tgaacacccc ctgaagaggg ttgcttatct tgatggaact caaaaagcca aaaagctgca ggcagagggc ttgaggacat gctgtcctac agctttgggg aactaagagc agcagcactt tcagattcag tccatataga cccacctgtg atgagccttg aacttgagg atgtgcgggtg cataaagggg ctggaagtga cccacctgtg atgagccttg tctaaggaga aggttttcca agagatcacc ccaccagaaa aggttaggaa tgagcaagtt gggaatttta gactgtcact gcacatggac ctctgggaag acgtctggcg agagtaggc ccaactggccc tacagacgga tcttgctggc tcacctgtcc ctgtggaggt tccctggga aggaagatg ccaacaaca gcactgctct gtcattggcc aatgttacct acatcacat ggaaattttt attggactct gcgccatagt ggcaacgtg ctggtcatct gcgtggtcaa gctgaacccc agcctgcaga ccaccacctt ctatttcat gtctcttag ccttgctgta cattgctgtt ggggtgctgg tcattgcctt ggccattgtt gtcagcctgg gcatacaaat ccacttctac agctgccttt ttatgacttg cctactgctt atctttacc acgctccat catgtccttg ctggccatcg ctgtggaccg atacttgcg gtcaagctta ccgtcagata caagaggggt accactaca gaagaatatg gctggccctg ggcctttgct ggctggtgtc attcctgggt ggattgaccc ccatgttttg ctggaacatg aaactgacct cagagtaacca cagaaatgtc accttccctt catgccaat tgtttccgtc atgagaatgg actacatggt atacttcagc ttctcactt ggattttcat cccctgggtt tcatctaac ttaattctga ggtaccacag ctgtgctgt agttcaagac ggctaagtcc ttgtttctgg tcttttctt tttgctctg tcatggctgc ctttatctat catcaactgc atcatctact ttaattggtga ggtaccacag ctgtgctgt acatggggcat cctgctgtcc catgccact ccatgatgaa cctatcgct tatggacggg aaataaagaa gttcaaggaa acctacttt tgatcctcaa agcctgtgtg tctgccata cctctgattc ttggacaca agcatgaga agaattctga gtagttatcc atcagagatg actctgtctc attgacctc agattccca tcaacaaaca cttagaggcc tgtatgcctg ggccaaggga tttttacatc ctgtgattact tccactgagg tgggagcctc tccagtgtc cccaattata tctccccac tccactact tcttctcca ctctattttt cctttgtcct ttctctctaa ttcagtgttt tggaggcctg acttggggac acgtattat tgatattat gtctgttttc ctcttccca atagaagaat aagtcattgga gcctgaaggg tgcctagtgtg acttactgac aaaaggctct agttgggctg aacatgtgtg tgggtgtgac tcattttccat	Homo sapiens

30	275	Adenosine A3 NP_000668.1 Receptor	gccaattgtgg aattgagcag agaacctgct ctgaggagat gcctagaaga tgttgggaac agaagaaata aactgagttt aaggggact taaactgctg aattcacctg tggatgtttt tgagtaata aagctaata g VGVLMPLAI ANVSLGITIHF YSCLFMTCLL LIFTHASIMS LLAIADVDRYL RVKLTVRKYR VTTHRIIWLALGLCLVLSFL VGLTPMFGWN MKLTSEYHRN VTFLSCQFVS VNRDMYMYF SFLTWIFPL VMCAIYLDI FYIIRNKLSL NLSNSETGA FYGREFTAK SLFLVLFLFA LSWPLSIIN CIIYFNGEVP QLVLYMGILL SHANSMMNPI VYAYKIKKFK ETYLLILKAC VVCHPDSLD TSIEKNSE	Homo sapiens
31	309	Melanocortin NM_000529 2 Receptor (adrenocorti cotropic hormone) (MC2R)	atgaagcaca ttatcaactc gtatgaaaac atcaacaaca cagaagaata taattccgac A tgtctctgtg tggttttgcc ggaggagata tttttcaca tttccattgt tggagtttt gagaatctga tgcctctgct ggctgtgttc aagaataaga atctccaggc acccatgtac tttttcatct tgaactggc catatctgat atgtctggga gctatataa gatcttgga aatatcctga tcatattgag aaacatgggc tatctcaagc cagctggcag ttttgaacc acagccgatg acatcatcga ctccctgttt gtccctccc accgactgctg gtaccacagc ctgtctgtga ttgctgcgga ccgctacatc accatcttcc agcactgctg gtaccacagc atcgtgacca tgcgcgcac tgtgtgtgtg cttaaggta tctggacgtt ctgcacggg actggcatca ccatggtgat ctctcccat catgtgccc cagtgatcac ctccacgtc ctgttcccgc tgaactgggt ctccatctctg tgcctctatg tgcacatgtt cctgctggt cgatccaca caggaagat ctccacccctc ccagagacca acatgaaagg ggcacatcac ctgaccatcc tgcctgggtt ctccatcttc tgcctggccc ccttctgtct tcatgtctc ttgatgacat tctgcccag taacccctac tgcgctgctc acatgtctct ctccaggtg aacggcatgt tgaactgtg caatgcccct attgacccct tcatatagc ctccggagc ccagagctca gggacgcat INNTARNSD CPRVLPEEI FFTISIVGL ENLIVLLAVF KNKNLQAPMY P FFICSLAID MLGSLYKILE NILIILNMG YLKPRGSFET TADDIIDSIF VLSLLGSIFS LSVIAADRYI TIFHALRYHS IVTMRRTAV LTIVTTFCTG TGITMVFISH HVPTVITFS LFPLMLVFIL CLYVHMFLLA RSHTRKISTL PRANMKGAT LTILLGVFIF CWAPFVLHVL LMTFCPSNPY CACVMSLFQV NGMLIMCNAV IDPFIYAFRS PELRDAFKKM IFCSRYW	Homo sapiens
32	309	Melanocortin NP_000520.1 2 Receptor (adrenocorti cotropic hormone) (MC2R)	tcttgccggc cgctcgttct gtgcccccg cccggccacc gacggcccg cgttgagatg A actttccgag atctcctgag cgtcagtttc gagggacccc gcccgacag cagcgcagg ggctccagcg cgggcggcgg cggggggcagc gggggcgccg cggcccccctc ggaggcccc gcggtggcg gcgtgccggg gggcgccggc ggcggcgccg gcgtggtggg cgcaggcagc ggcaggaca accggagctc cgggggggag cgggggagcg cggcgccggg cgcgacgtg aatggcacg cggccgtcgg ggactggtg gtgagcgccg agggcggtgg cgtggcgctc ttcctggcag ccttccatc tatggccgtg gcaagtaacc tgcctgtcat cctctcagt gcctgcaacc gccacctgca gacgtcac aactattca tccgtgaacct ggcctggcc gacctgctgc tgagcgccac cgtactgccc ttctcgccc ccatggaggt tctggcctc tgggcccctt gccgcgcct ctgcgacgta tggccggcg tggacgtgct gtgctgacg gcctccatcc tgaacctctg caccatctcc gtggaccggt acgtggcggt gcgccactca	Homo sapiens
33	376	Alpha 1d- adrenoceptor		Homo sapiens

34	Alpha 1d- adrenoceptor	NP_000669.1	ctcaagtacc cagccatcat gaccgagcgc aagggcgccg ccactcctggc cctgctctgg gtcgtagccc tgggtggtgc cgtagggccc cgtgctgggct ggaaggagcc cgtgccccct gacgagcgt tctgcggtat caccgaggag gggggtctacg ctgtcttctc ctcggtgtgc tccttctacc tgcccatggc ggtcatcgtg gtcacgtact gccgcgtgta cgtggtcgcg cgacgaccca cgcgcagcct cgaggcaggc gtcaagcgcg agcgaggcaa ggcctccgag gtggtgctgc gcatccactg tcgcggcgcg gccacgggcg ccgacggggc gcaaggcatg cgacgcgcca agggccacac ctccgcgagc tcgtctctcg tgccctgct caagtctctc cgtgagaaga aagcgcccaa gactctggcc atcgtcgtgg gtgtcttctg gctctgctgg ttccctttct tctttgtcct gccgctcggc tccttggtcc cgcagctgaa gccatcgag ggcgtcttca aggtcatctt ctggctcggc tacttcaaca gctgcgtgaa ccgctctcat taccctggtt ccagccgcca gttcaagcgc gccttctctc gctctcctgc ctgccaagtgc cgtcgtcgcc ggccgcccgc cctctcttgg cgtgtctacg gccaccactg gcgggctctc accagcgccc tgcgccagga ctgcgccccg agtctgggag acgcgcccc cggagcgccc ctggccctca ccgcgctccc cgaccccgac ccgcaacccc caggcaaccc cgagatgcag gtcccggtcg ccagccgtcg aaagccacc agcgccttcc cgcagtgagg gctgctgggg ccgttcggga gaccacagac ccagctgcgc gccaaagtct ccagcctgtc gcacaagatc cgcccggggg gcgcgcagcg cgcagaggca cgtgcgcccc agcgtcaga ggtggaggct gtgtccctag gcgtccaca cgaggtggcc gagggcgcca cctgccaggc ctacgaattg gccgactaca gcaacctacg ggagaccgat atttaaggac ccagagacta ggcgcggag tgtgtctggc ttgggggtaa gggggaccag agagcgggc tggtgttcta agagccccg tgcaaatcgg agacccggaa actgatacag gctgctgctc tbtgacatcc ctgaggaact gggcagagct tgaggctgga gcccttgaaa ggtgaaaagt agtggggccc cctgctggac tcaggtgccc agaactcttt tcttagaagg gagaggtgc gggctccttg gggccttttg ctcccaatcc ctatttgaga aacactgccc catctccat gccctgaacc ctgagtagac agccccaagc atggccagga aggcctgccc SGEDNRSSAG EPGSAGAGGD VNGTAAVGGI VVSAQGVGVG PAVGGVPGGA GGGGVVVGAG P VACNRHLQTV TNYFIVNLAV ADLLSATVL VFLAAFILMA VAGNLLVILS TASILSLCTI SVDRYVGVHR SLKYPAINTE RKAAILALL WVVALVSVG PLLGWKEPVP PDERFCGITE EAGYAVFSSV CSFYLPMAVI VMYCRVIVV ARSTTRILEA GVKRERGKAS EVVLRHCRG AATGADGAHG MRSAGHTFR SLSVRLLEK SREKKAATL AIUVGVFVLC WFFFFVFLPL GSLFPQLKPS EGVFKVIFWL GFNSCNPL IYPCSSREFK RAFLRLLRQC CRRRRRRRPL WRVYGHWRRA STSGLRQDCA PSSGDAPPGA PLALTALPDP DPEPPGTPEM QAPVASRRKP PSAREWRLL GPFRRPTQL RAKVSSLSHK IRAGGAQRAE AACQORSEVE AVSLGVPHEV AEGATCQAYE LADYSNIRET DI 377 Alpha 1b- adrenoceptor	NM_000679	aggcaggaga cgtgctgcgg gctgggctgc ccgggggaga tgactcctgc caggagggag A cctctgggaa gaagaccacg ggggaagcaa agtttcaggc cagctgagga gccttcgccc cagcccttcc gagcccaatc atccccagg ctatggaggc cggactctaa gatgaatccc gacctggaca ccggcccaaa cacatcagca cctgcccact ggggagagtt gaaaaatgcc aacttcaact gcccacaaca gacctcagc aactccacac tgccccact ggacatcacc agggccatct ctgtgggccc ggtgctgggc gccttcatcc tctttgccc cgtgggcaac	Homo sapiens
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36	Alpha 1b- adrenoceptor	NP_000670.1	<p>atcctagtagtca tcttgtctgtg ggctgtgcaac cggcacctgc ggacgcccc caactacttc atgtcaaac tggccatggc cgaactgctg ttgagcttca ccgtcctgccc cttctcagcg gccatagagg tgcctgggcta ctgggtgctg gggcgatct tctgtgacat ctgggcagcc gtgatgtcc tgtgtgacac agcgtccatt ctgagcctgt gcgccatctc catcgatcgc tacatcgggg tgcgtactc tctgcagtat cccacgtggg tcacccggag gaagcccatc ttggcgctgc tcagtgtctg ggtctgtgccc agctcatctt ccacggggc tctccttggg tggaaggagc cggcacccaa cgaatgacaag agtgcggggg tcaccgaaga accctctat gccctcttct cctctctggg ctccttctac atccctctgg cggctattct agtcatgtac tgccgtgtct atatagtggc caagaagaac accaagaacc tagaggcagg agtcatgaa gagatgtcca actccaagg gctgacctg aggtaccatt ccaagaactt tcacgaggac acccttagca gtaccaaggc caagggccac aacccaggga gttccatagc tgtcaactt tttaagtctt ccagggaataa gaaagcagct aagacgttgg gcatgtggt cgtatgttc atcttgtgtc ggtaccctt cttcctgctt caagtggtg tcttggtgg gctacttcaa cagctgcctc aagcccccg agcctgtgtt caagtggtg ctcagcaag gatttcaagc gcgcttctg ggcacccctg aaccccatca tctaccatg ctcagcaag gatttcaagc gcgcttctg ggcacccctg gggtgccagt gcccgggccg cggccgcgc gtggacgccc ggcggctgc tggagcgtc cctggcgcc tgccctaca cctaccgccc gtggacgccc ggcggctgc tggagcgtc cctggcgcc aaggactgc tggacgacag cggcagctgc ctgagcgga gccagcgac cctggcgcc gcctgcgga gcccgggcta cctggcgcc ggcgcgccc cgcagtcga gctgtgcgc ttcccgagt ggaaggcgcc cggcgccctc ctgagcctg cgcgcctga gcccccgcc cgcgcggcc gccacgactc ggcccgctc ttcacttca agtctctgac cgagcccgag agccccgga ccgacggcg cgcagcaac ggaggtgctg aggcggcgcc cgacgtggcc aacggggcagc cgggcttcaa agcaaacatg cccctggcc cggcgagtt ttagggcccc cgtgcgagc tttcttccc tggggaggaa aacatcgctg ggggga MNPDLDTGHN TSAPAHWGEL KNAFTGPNQ TSSNSTLPQL DITRAISVGL VLGAFLFAI P VGNILVILSV ACNRHLRTPT NYFIVNLAMA DLLLSFTVLP FSAALEVLGY WVLGRIFCDI WAAVDVLCCT ASILSLCAIS IDRYIGVRS SFYIPLAVIL VMYCRVYIVA KRTTNLEAG LLGWKEPAPN DDKECGVTEE PFYALFSSLG KGHNPSSIA VKLFFKSREK KAAKTLGIVV VMKEMSNKE LTLRIHSKNF HEDTLLSSTKA KVVFWLGYFN SCINPIIYPC SSKEFKRAFV GMFILCWLPF FIALPLGSLF STLKPPDAVF WTRGGSJERS QSRKDSLDDS GSCLSGSQRT RILGCQCRGR GRRRRRRRRR LGGCAYTYRP ICAFFEWKAP GALLSLPAPE PPRRGRHDS GPLFTFKLLT LPASAPSPGY LGRGAPPPVE DVANGQPGFK SNMPLAPGQF EPESPGTDGG ASNGGCEAAA gaattccgaa tcatgtgcag aatgctgaat ctccccccag ccaggacgaa taagacagcg A cggaagaagca gattctcgta attctggaat tgcattgttc aaggagtctc ctggatcttc gcacccagct tgggttaggg agggagtcgg ggtccccggc taggcagacc cggcaggtgg agaggttccc cggcagcccc agggctggcc aggttggttt cccaccccg cgcgctct gtgaccttct gaggttccc agggctggcc aggttggctt cccaccccg cgcgctct cacccccagc caaacccacc tggcagggct cctccagcc gagacctttt gattccccggc tcccgcgctc ccgcctccgc gccagccccg gaggtggccc tggacagccg gacctgccc ggccccggct gggaccatgg tgttctctc gggaaatgct tccgacagct ccaactgcac</p>	Homo sapiens
37	Alpha 1c- adrenoceptor	NM_000680	<p>gaattccgaa tcatgtgcag aatgctgaat ctccccccag ccaggacgaa taagacagcg A cggaagaagca gattctcgta attctggaat tgcattgttc aaggagtctc ctggatcttc gcacccagct tgggttaggg agggagtcgg ggtccccggc taggcagacc cggcaggtgg agaggttccc cggcagcccc agggctggcc aggttggttt cccaccccg cgcgctct gtgaccttct gaggttccc agggctggcc aggttggctt cccaccccg cgcgctct cacccccagc caaacccacc tggcagggct cctccagcc gagacctttt gattccccggc tcccgcgctc ccgcctccgc gccagccccg gaggtggccc tggacagccg gacctgccc ggccccggct gggaccatgg tgttctctc gggaaatgct tccgacagct ccaactgcac</p>	Homo sapiens

38	Alpha 1c- adrenoceptor	NP_000671.1	<p> ccaaccgcg gcaccgggtga acattttccaa ggcattcttg ctccggggtga tcttgggggg cctcattctt ttcgggggtgc tgggtaacat cctagtgtac cctccgttag cctgtcacccg acactgcac tcagtcacgc actactacat cgtcaacctg gcggtggccg acctctcgt cacctccacg gtgctgccct tctccgccat tctcaggtc ctaggctact gggccttcgg cagggtcttc tgcaacatct gggcgccagt ggtgtgctg tctgcaccg cgtccatcat ggcctctgc atcatctcca tcgaccgcta catcgccgtg agctaccgc tgcgtacccc aaccatcgtc accagagga ggggtctcat ggctctgctc tgcgtctggg cactctccct ggtcatatcc attggacccc tgttcggctg gaggcagccg gccccgagg acgagaccat ctgccagatc aacgaggagc cgggtactgt gctcttctca gcgtgggt cctctacct gccttggtc atcatcctgg tcatgtactg ccgctctac gtggtggcca agagggagag cggggcctc aagtctggcc tcaagaccga caagtccgac tcggagcaag tgacgtccc catccatcgg aaaaacgccc cggcaggagg cagcgggatg gccagcgcca agaccaagac gcactctca gtgaggctcc tcaagtctc ccgggagaag aaagcgcca aaacgctggg catcgtgtc ggctgcttc tccctgtctg gctgcctttt tcttagtca tggcattgg gtcttcttc cctgatttca agcctctga aacagttttt aaaaatagat tttggctcgg atatctaac agctgcata acccatcat ataccatgc tccagccaag agttcaaaaa ggcctttcag aatgtcttga gaatccagt tctccgaga aagcagtctt ccaacatgc cctgggtac accctgcacc cggccagcca ggcgtggaa gggcaacaca aggacatggt gcgcacccc gtggatcaa gtagacatc ctacaggatc tccaagacgg atggcggtttg tgaatggaaa tttttctctt ccatgccccg tggatctgc aggattacag tgtccaaaga cgaatctcc tgtaccacag ccgggtgag agtaaaagc ttttggagg tctgtctgtg ttagggccc tcaaccccc gccctgacaa gaacatcaa ttccaaacca ttaagggtcca cacatctcc ctcatgaga acggggagga agtctaggc agaaagatg cagaggaaaag gggaataatc ttaggtacc acccacttc cttctcgaa ggcagctct tcttgaggga caagacagga ccaatcaag aggggacctg ctgggaatgg ggtgggtggt agaccact catcaggcag cgggtaggc acagggaaga gggagggtgt ctcaacacca accagttcag aatgatacgg aacagcatt cctgcagct aatgctttct tggctactct gtgccactt caacgaaaa caccatggga aacagaattt catgcacaat ccaaaagact ataaatatag gattatgatt tcatcatgaa tatttgagc acacactcta agttggagc tatttcttga tggaagttag gggattttat tttcaggctc aacctactga cagccacatt tgacatttat gccgggaattc </p>	Homo sapiens
379	Alpha 1c- adrenoceptor	NP_000671.1	<p> MVFLSGNASD SSNCTQPPAP VNISKAILLG VILGGLILFG VLGNILVILS VACHRHLSV P THYYIVNLAV ADLLTSTVL PFSATFEVLG YWAFGRVFCN IWAADVVLCC TASIMGLCII SIDRYIGVSY PLRYPTIVTQ RRLMALLCV WALSLVISIG PLFGWRQPAP EDETICQINE EPGYLFSAL GSFYLPALAI LVMYCRVYV AKRESRGLKS GLKTDKSDSE QVTLRIHRKN APAGSGMAS AKTKHFSVR LLKFSREKKA AKTLGIVVGC FVLCWLPFFL VMPIGSFFPD FKPSETVFKI VFWLGYLNSC INPIIYPCSS QEFKKAQNV IRIQCLRRKQ SSKHALGYTL HPPSOAVEGQ HKDMVRIPVG SRETFYRISK TDGVCEWKEF SSMPRGSARI TVSKDQSSCT TARVRKSFL EVCCVGPST PSLDKNHQVP TIKVHTISLS ENGEV gcgctcggcg cccaccaggc ggacgcccag gagaaccttc gcctccgtcg cggtcccttg A agagctgac gtccactgc cccggccgc ctgaggacgg ggtgccttc atgcggcccc </p>	Homo sapiens
39	Alpha 2a- adrenoceptor	NM_000681		

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40	Alpha 2a- adrenoceptor	387	AAA51664.1	<p> gctcacaaaa ggttaaatgga tggggggttac ctaggccctgg ctaattcccc ttccattccc aactctctct ctctttttga agaaaaatgc taagggcagc cctggcctgc ctccccatcc cccgctgtaa atatacata tttttgatag cacacatggg gccccatat ctcttggcct tgggtttgat gttgaaatcc tggccttggg agagatgctt tccaggcaga cacagctgtc tgggttcaggc caagccctt tcaccagcaa ctggtgactg tcccttcgac acggacctgc tttgagattt gtcgtggttt tcaccagcaa ctggtgactg tttccatttt tttcctgtgc ctaacagcat aattgccttt cctgacaggg aaaagatttc atattatgat ggtggatcaa gacataaagta aatgagcctt tctgctcac tcctatgtaa atattatgat ggtggatcaa gacataaagta aatgagcctt tctgctcac atcagccctg tgtataaagc cattattctc tcatgactgc tttgccccag taactcactt taaaacctct ctctccagtg tccctctctc cctccaggg cactgcttg aagaagaata tgtatgtttc tatcttttat gttgtgtgc cctcctgcg ccgaaagtgc tgactatggg gaaatctttt agctgctgtt tttgactcc aaggagtga aattatgtgg aagaagcaaa cctgatacaa ttggcccaag gtaaacagt tgaagaaga aatggcctg ccaaaactgta cagtttcttc ccaagagct gttaggtatc aaaaattgtt cctttcccc ctcctgtgctt ttctgggtga gatcatgtca ttgatgaact gcaaaagtca ggggaggagg gcagagactt tgtgtttaca tctgcatttc tacatgtttt agacagagac aatttaagg ctcgactctt atctcactaa agaaaaacta atgtcagcac atgttgctaa tgacagtga tttttttta aataaaaaag ttacagatc aatgtgaaa taaatagtga tggagtgtc aaa MGSIQPDAGN ASWNGTEAPG GGAATPYSL QVTLTLVCLA GLMLLTVFG NVLVIIVFT P SRALKAPQNL FLVSLASADI LVATLVIPIFS LANEVMGYWY FGKTWCEIYL ALDVLFTSS IVHLCAISLD RYWSITQAI EYNLKRTPRI KAIITCWVI SAVISFPLI SIEKKGSGGG PQPAEPRCEI NDQKWYVISS CIGSFAPCL IMILVYRIY QIAKRRTRVP PSRRGPDVA APPGTERRP NGLGPERSAG PGAAEPLP TQNGAPGEP APAGPRDTDA LDLEESSSD HAERPPGPRR PERGPRGK GK ARASQVKPGD SLRGAGRGR RSASGLPRRR AGAGGQNL EK RFTFVLAVI GVFEVCFWFF FTYTLTAVG CSVPRILEKF FFWFGYCNSS INPVIYTFN HDEFRAFKKI LCRGDRKRIV </p>	Homo sapiens
41	Alpha 2b- adrenoceptor	388	NM_000682	<p> atggaccacc aggacccta ctccgtgcag gccacagcgg ccatagcggc ggccatcacc A ttcctcattc tctttaccat ctctggcaac gctctggtca tcttggctgt gttgaccagc cgctcgctgc gcgccccca gaaactgttc ctggtgtcgc tggcggcgcg cgacatcctg gtggccacgc tcatcatccc tttctcgctg gccaacgagc tgcgtggcta ctggtacttc cggcgacgtt ggtgcgaggt gtacctggcg ctgcagctgc tcttctgcac ctgctccatc gtgacactgt gcgcatcag cctggaccgc tactggcggc tgagccgcgc gctggagtag aactccaagc gcaccccgcg ccgcatcaag tgcatactc tcactgtgtg gctcatcgcc gccgtcatct cgtgcgcgc cctcatctac aaggcgacc agggccccca gccgcgcggg cgccccagtg gcaagctcaa ccaggaggcc tggtaacatc tggcctccag catcgatct ttctttgtct cttgcctcat catgatcctt gttacacctg gcatctacct gatcgccaaa cgagcaacc gcagaggttc cagggccaa gggggcctg gtcaggggtga gtccaagcag ccccgacccg acctggtgg ggttttgcc tcagccaaa tcagagcctt ggcctctgtg gcttctgcca gagaggtcaa cggacacatc aagtcactg gggagaaagg ggagggggag acccctgaag atactgggac ccgggccttg ccaccagtt gggctgacct tcccaactca ggccagggcc agaaggaggg tgtttgtggg gcactctcag aggatgaagc tgaagaggag </p>	Homo sapiens

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Homo

NP_000673.1

MDHQDPYSVQ

ATAAIAAIT

FLILFTIFGN

ALVILAVLTS

RSLRAPQNL

LVSLAAADIL

P

Alpha 2b-

388

42

adrenoceptor		sapiens
		sapiens
		Homo sapiens
43	389	Alpha 2c- adrenoceptor
		NM_000683
		<p>VATLIIPFSL ANELLGYWF RRTWCEVYLA LDVLFCTSSI VHLCAISLDR YMAVSRALEY NSKRTPRRIK CIILTWWLIA AVISLPLIY KGDQGPQPRG RPQCKLNQEA WYILASSIGS FFAPCLIMIL VYLRIYLIK RSNRRGPRAK GPGQGSGESQ PRPDHGGLA SAKLPALASV ASAREVNGHS KSTGEKEGE TPEDTTRAL PPSWAALPNS GQGQKEGVCG ASPEDEAEFE EEEEEEEEEC EPQAVPVSPA SACSPLQOP QGSRVLATLR GQVLLGRGVG AIGGQWRRRR AHVTREKRET FVLAVVIGVF VLCWFFFFFS YSLGAICPKH CKVPHGLFQF FFWIGYCNSS INPVIYTIEN QDFRRAFRI LCRPWTQTAW</p> <p>ctgcaggcgg ccttgagggg ggcgcctctg ccgagcgcgc gccccgcgc gccgccccgg A actctctccc ggcgcgcgcg ggcaggttc gaccaggcg ccgcgggctc cggttccccg ccagctcccc agggcccgcg gcgcgcgcgc ccgcgcgcgc gccccgtgc gctaaactga cccaagtgg aagccgatc cagcgccgcg cactcgcgc cagcagggc ggcggcgcg gcggcgcgcg agctccggcg agcaggcgcg cggccgcacg gcaagcgtgg acccgggggg gcgcgcgcgc cgggagcgc cggagggactc gcggcgcgcg cggcgcgcgc ccgaggaaag taaaagtga gacggaggga gcgcgcgggg cgggccccga ggagcggcg ccgggcccc ggcgcgcgca gccctagcgc ccggatggga ggcggacgc ccgggcgcgc cgcgccttgt cgctcgcc ccggctgggc tccgggacgc cggggccgct acggcacgc cgtcgggc gcgtcgcgcg ggcgcgcgc cgggcgcgc ccgtgagcgc ggccgaggcg gggcgcgcg ggacccccgg acctgcccc ctcccccgc agcgcgctc ccgtcgcgc cggcgccctc ctgctctgca cttacacgct cggcagctgc ggggagcccc gcagccacgc tctccgggc gccgccccgc gaccaccac ggcgagggc cggctgctgg gcgcgcggt ccccgcgcg cgcgccccag cagcaggcg cgtgcgggc gccgaccccc gctggggggc gcccgagctg cgcggctgc gcccggtc caggaggcg cggtagcccc gcgggaggac catggcgctc ccggcgctgg cggcgcgct ggcgtggcg gcctggcggc gcccaatgc gagcgcgcg ggcgagagg gcagcgcg ggttgccat gcctcgggg cctcctggg gccgcgcgc ggccagtag cggcgggcg ggtggcagg cttggctgccc tggtgggctt cctcctgc ttcaccgtgg tgggcaacgt gctggtgggt atcgccgtgc tgaccagccg ggcgtgccc gcgccacaga acctctct cgtgctgct caacgagctc atggcctact acatcctggt ggcacgctg gtcatgccct tctcgttgg acctggcgct cgtatgctg ttttgacact cgtcgtgctg tgccgctgt acctggcgta cttgctggt cgcagggcg tcgagtacaa cctgaagcgc gccatcagcc gcgtcaagg caccatgct cccgtgtggc tcactcggc cgtcatctcc acaccacgc gcgtcagct ctaccgccc cccgagggc ccgcctaccc gcagtgcgc ttcccgccc ggtctcgt caccctgtcc cctcgatcg gctcctctt cgcgcctgc ctcaacgacg agacctggt caccctgtcc cgcgcgcatc taccgagtg ccaagcgtc cagcgccacg ctcatcatgg gcctggtcta cgcgcgcatc cgtgggcccc gacggtgct ccccgactac cgaacacggg ctcagcgaga agcgcccc cgtgggcccc ggcgagaaag ggcactgccc gccccgcgc gccgacgtgg ctggggcgcg cggcaggcga ggcgcgaga ggcggcgcg cggggccgtt gcggcgggg agccggacga gacagcga ggcgcgaga ggcggcgcg cgggccccgtt gcggcgggg ggcgcgcgcc gagcgggcg ggagggggg gcggcgcggt cggacgggca gggggcgggg ccggggcgcg ctacgtcgg ggcgtgacc gcctccaggt ccccgggggc cgggtggcgc ctctcgcg ccagctcgc ctcgctcag tctctcctgt cgcgcggcg ccggcgcgcc agcagcgtgt gccgcccaa ggtggcccg gcgcgcgaga agcgtctac cttgtgtg</p>

44	389	Alpha 2c- adrenoceptor	NP_000674.1	MASPALAAL AVAAAAGPNA SGAGERGGG VANASGASWG PPRQYSAGA VAGLAAVVGF P LIVFTVGNV LWIAVLTSR ALRAPQNLFL VSLASADILV ATLVMPFSLA NEIMAYWYFG QVWCGVYLAL DVLFTSSIV HLCALSLDRY WSVTQAVEYN LKRTPRRVKA TIVAVWLISA VISFPLVSL YRQPDGAAYP QCGLNDETWY ILSSCIGSFF APCLIMGLVY ARIYRVAKR TRTLSEKRAP VPGDGASPTT ENGLGAAQGE ARTGTARPRP PTWSRTRAAQ RPRGGAPGPL RRGGRRRAGA EGGAGGADGQ GAGPGAQSG ALTASRSPGR GVRLSRASSR SVEFFLSRRR RARSSVCRRK VAQAREKRFT FVLAVVMGVF VLCWFPEFFFI YSLYGICREA CQVPGPLKFE FFWIGYCNSS INPVIYTVFN QDFRPSFKHI LFRRRRRGRF Q	Homo sapiens
45	599	Bradykinin B1 Receptor	NM_000710	ctgtgcatgg catcatcctg gccccctcta gagctccaat cctccaaacca gagccagctc A ttccctcaaa atgtacaggc ctgtgacaaat gctccagaag cctgggacct gctgcacaga gtgctgccga cattatcat cctcatctgt ttcttcggcc tcttagggaa cctttttgtc ctgttggtct tcctcctgcc cggcgggcaa ctgaacgtgg cagaaaatcta cctggccaaac ctggcagcct ctgatctggt gttgtcttg ggttgccct tctgggcaga gaatatctgg aaccagttta actggcctt cggagccctc ctctgccgtg tcatcaacgg ggtcatcaag gccaatgtgt tcatcagcat ctctcctgtg gtggccatca gccaggaccg ctaccgcgtg ctggtgacc ctatggccag cggaaggcag cagcggcgga gccaggcccc ggtcacctgc gtgctcatct ggggtgtggg gggcctcttg agcatcccca cattcctgct gcgatccatc caagccgtcc cagatctgaa catcacgcc tgcctcctgc tcctcccca tgaggcctgg cactttgcaa ggattgtgga gttaaaatatt ctgggtttcc tcctaccact ggctgcgac gtctcttca actaccacat cctggcctcc ctgcgaacgc gggaggagggt cagcaggaca agagtgcggg ggcgaagga tagcaagacc acagcgtga tcctcacgct cgtggttggc ttcctggtct gctgggcccc ttaccacttc ttgacctcc ttggaattctt attccaggtg caagcagtc gaggtgctt ttgggaggac ttcattgacc ttggcctgca attggccaac ttcttgctt tcaactaacg ctccctgaat ccagtaattt atgtctttgt gggccggctc ttcaggacca aggtctggga actttataa caatgcacct taaaagtct tgcctcaata tcttcatccc ataggaaaga aatcttccaa cttttctggc ggaattaaaa cagcattgaa cc	Homo sapiens

46	599	Bradykinin B1 Receptor	NP_000701.1	MASSWPPLEL QSSNQSLFP QNATACDNAP EAWDLHRVL PTFIISICFF GLGNLFVLL P	Homo sapiens
				VFLPRLQLN VARIYLANIA ASDLVFVLGL PFWAENIWNQ FNPFGALLC RVINGVIKAN	
				LFISIFLVA ISODRYRVLV HPMASGRQQR RQARVTCVL IWVVGLLSI PTFLLRSIQ	
				VPDLNITACI LLLPHEAWHF ARIVELNIG FLLPLAAIVF FNYHILASLR TREEVSRTRV	
				RGPKDSKTTA LILTLVAVFL VAWPYHFFA FLEFLFQVQA VRGCFWEDFI DLGLQLANFF	
47	600	Bradykinin B2 Receptor	NM_000623	AFTNSSLNVP IYVFGRLFR TKWELYKQC TKSLAPISS SHRKEIFQLF WRN	Homo sapiens
				atgtttctctc cctggaagat atcaatgttt ctgtctgttc gtgaggactc cgtgcccacc A	
				acggcctctt ttagcgccga catgctcaat gtcaccttgc aaggccccac tcttaacggg	
				acctttgcc agagcaaatg ccccaagt gtggtgctgg gctgggtcaa caccatccag	
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				ggtccctgat acaacctgg agaccaggat ttatggctc cctcactga tggacaagga	
				ggtctgtgccc aagaagaat ccaataagca catattgagc acttgctgta tatgcagtat	
				tgagcactgt aggcaagacc caagaaagag aaggagccat tctcatctg aaggaactca	
				aagactcaag tgggaacgac tgggcactgc caccaccaga acgtgttgc acgagacggt	
				cgagcaggggt gctgtgggtg atatggacac cagaagggg agaccaaggt tccagctcaa	
				ccaataacta ttgcacaacc acctgtccct gcctcagttc ccttttatgt aacatgaagt	
				cgttgtgagg gttaaaaggca gtaacaggta taaagtactt agaaaagcaa aggggtgctac	

48	600	Bradykinin B2 Receptor	NP_000614.1	<p>gtacatgtga ggcacatatta cgcagacgta actgggatat gttactata agaaaaagac actgaggtct agaaatagct ccgtggagca gaatcagtat tgggagccgg tggcggtgtg aagcaccagt gtctggcaca cagtaggctc tcttccacct gtcattccca ccacctgag gcccaaccg ccacacacac aggagcattt ggagagaagg ccatgtcttc aaagtctgat ttgtgatgag gcagaggaag atatttctaa tcggtcttgc ccagaggatc acagtgtga gacccccac caccagccgg tacttgggaa gggggagagt gcaggcctgc tcagggaactg ttctgtctc agcaaccaag ggattgttcc tgtcaatcaa tggtttattg gaaggtggcc cagtatgagc cctagaagag tgtgaaaagg aatggcaatg tgtttcacc tcggcagtcg cagggcagca ctcattcact tgataaatga atatttatta gctggttgg gagctagaac ctggagagct agaacctgga gaactagaac ctggagggtc agaacctgga gaggctagaa ccaagaaggg ctagaacctg gagggttaga acttagaga agctaaacc tgagctagaa gctggaggac tagaacctgg agggctgga tctgaaggc tagaacctgg agggctgga tctggagagc tagaacctgg agggctagaa cctggaggc tagaacctag aagggtctga acctggaggg ctggaatctg gagagctaga acctggagg ctagaacctg gagggtaga acctagaag gctagaacct ggagggttag aacctggaa gggctagaac agaagggtc gaacctggag agccagaacc tggagggtc gaacctggaa gggctagaac ctgtagagct agaactgga gaggtagaac ccggcaggct agaacctggc aagctagaac ctggaggga tgaacctgga gggctagaac ctggagaatg agaaaaatct acatggcaaa gagccataa atctgaccca atccaaactc tccccaccac cactctctc tgcctcagt atccctctc taccaccaac cactctctt tccccaccac cactctctc tgcctcagt aagtatctg aggaagaaaa cagtgaaag aagaagtaaa accatttag tattagtatt agaatgaag caaactgtgc cacacatggt gaatgaaaa aaaaaaaaagg agctgtgtt ttgtcacaca gggcagtcac tcagcaccag agcacgtgat ggtctgagac tctcttagga gcagagctct gccgcaatg ccatgtggg atccacacct ggtctgagg gcaactgagt ctcggggaga agagcgccc tatgcatggt gtagatgcc tgataaaga catctgtcct gtgaaaagact caatgagctg ttatgttga aacaggaagc atttcacac caaacgagaa aatcatgtaa acatgtgtct tttctgtaga gcataataaa tggatgaggt ttttgcacaaa aaaaa</p>	Homo sapiens
49	635	Beta-1 adrenoceptor	NM_000684	<p>tgctaccgc gcccggtt ctgggtgtt ccccaaccac ggcccagccc tgccacacc A cccgccccg gcctccgag ctcggcatg gcgcggggt gctcgtcctg ggcgctccg agcccggtaa cctgtcgtc gccgcaccg tccccagcg cgcgccacc ggcgcgccg tgctgtgccc cgcgtgcgc cccgctcgt tgcgtcctc cgccagcga agccccgagc cgctgtctca gcagtgaca gcgggcagtg gctcgtgat ggcgtcatc gtgctgtca tcgtggcggg caatgtgctg gtgcatctgg ccatgccaa gacgcgcg ctgcagacgc</p>	Homo sapiens

50	635	Beta-1 adrenoceptor	NP_000675.1	<p> tcaccaaacct cttcatcatg tccctggcca ggcgcgacct ggtcatgggg ctgctggtgg tgccgttcgg ggcaccatc gtggtgtggg ggcgttgga gtacggctcc ttcttctgog agctgtggac ctacgtggac gtgctgtgog tgacggccca catcgagacc ctgtgtgtea ttgcccggga cgcctacct gccatcacct cgccttccg ctaccagagc ctgctgacgc gcgcgcgggc ggcgggccc gtgtgcacc gtgtggccat ctcgccctg gtgtccctcc tgccatcct catgcaactg tggcgggcg agagcgacga ggcgcgcgc tgcataaacg acccaagtg ctgcgacttc gtcaccaacc ggcctacgc catcgctcg tccgtagtct ccttctacgt gccctgtgc atcatggcct tctgtacct gcgggtgttc cgcgagccc agaagcaggt gaagaagatc gacagctgc agcgcgttt cctcgcggc ccagcgcggc cgcctcgcc ctgcctcgc cccgtcccc cgcgcgcgc gccgcgcga ccccgcgcc ccgcgcgcgc cgcgcgcacc gcccgcgtg ccaacgggog tgcgggtaag cgcgcgcct cgcgcctcgt ggcctacgc gacgagaag cgtcaagac gctgggcatc atcatgggog tcttcacgct ctgctggctg ccttcttcc tggccaacgt ggtgaaggc ttccacgcg agctggtgcc cgaccgctc ttcgtcttct tcaactggct ggcctacgc aactcgccct tcaaccccat catctactg cgcagcccc cgttcgcaa ggcctccag gactgctct gctgcgcgc cagggtgccc ggcgcgcgc cgcgcgcgc ggcgcgcgc ggcgcgcgc cgggctgtct cgtcggggccc agccgcgcgc cgcgcgcgc ggcgcgcgc ggcgcgcgc acgacgatg cgtcggggccc agccgcgcgc cgcgcgcgc ggcgcgcgc ggcgcgcgc acgcgcgcgc ggcgcgcgc agcgcgcgc ggcgcgcgc ggcgcgcgc ggcgcgcgc cctcggaatc caaggtgtag ggcgcgcgc ggcgcgcgc ggcgcgcgc ggcgcgcgc gggaacgag agatctgtgt ttaactaaga cgcgtagcag gtgaactcga agcccaaat cctcgtctga atcatccgag gcaagagaa aagccacgga cctgtgcaca aaaagaaag ttggaagag gatgggagag tggctgtgt atgttcttctg ttg MGAGVLTGA SEPNLSSAA PLPDGAATAA RLIVPASPPA SLPPASEP EPLSQWTAG P MGLMALIVL IIVAGNVLI VAIKTPRLQ TLTNLFIMSL ASADLVMLL VVPEGATIV WGRWEYGSFF CELWTSVDVL CVTASITELC VIALDRYLAI TSPFRYQSL TRARAGLVC TVWALSALVS FLFILMHWNR AESDEARCY NDPKCCDFVT NRAYAIASSV VSFYVPLCIM AFVYLRVRE AQKQVKIDS CERRFLGGA RPPSPSPSPV PAPAPPPGPP RPAATAATAP LANGRACKRR PSRLVALREQ KALKTGLIIM GVFTLCWLPF FLANVKAFF RELVPRLEFV FENWLGYSAN AFNPIIYCRS PDKFAFQGL LCCARRAARR RHATHGDRPR ASGLARPPG PPSPGAASDD DDDDVVGATP PARLLEPWAG CNGGAAADSD SSLDEPCRP FASESKV actgcgaagc ggcttcttca gagcacgggc tggaactggc aggcacgcgc agcccttagc A accgcacaag ctgagtgtgc aggcagatc cccaccacac ccaaccaca gccctgaat gagcttcca ggcgtccgt cgcgcgcgc agagccccgc cgtgggtccg ccgctgaggg cgccccccag cagtgcgctt acctgccaga ctgcgcgcca tggggcaacc cgggaacggc agcgcttct tgcgtggcacc caatagaagc catgcgcgcgc accacgacgt cacgcagcaa aggcagaggg tgtgggtggt ggcgatgggc atcgtcatgt ctctcatgt cctggccatc gtgtttggca atgtgctggt catcacagcc attgcaagt tgcagcgtct gcagcggtc accaactact tcatcacttc actgcctgt cgtgatctgg tcatgggctt ggcagtggtg ccttttgggg ccgccccat tcttatgaaa atgtggactt ttggcaact ctggtgcgag ttttggactt ccattgatgt gctgtgcgtc acggccagca ttgagaccct gtgctgctgc </p>	Homo sapiens
51	640	Beta-2 adrenoceptor	NM_000024	<p> actgcgaagc ggcttcttca gagcacgggc tggaactggc aggcacgcgc agcccttagc A accgcacaag ctgagtgtgc aggcagatc cccaccacac ccaaccaca gccctgaat gagcttcca ggcgtccgt cgcgcgcgc agagccccgc cgtgggtccg ccgctgaggg cgccccccag cagtgcgctt acctgccaga ctgcgcgcca tggggcaacc cgggaacggc agcgcttct tgcgtggcacc caatagaagc catgcgcgcgc accacgacgt cacgcagcaa aggcagaggg tgtgggtggt ggcgatgggc atcgtcatgt ctctcatgt cctggccatc gtgtttggca atgtgctggt catcacagcc attgcaagt tgcagcgtct gcagcggtc accaactact tcatcacttc actgcctgt cgtgatctgg tcatgggctt ggcagtggtg ccttttgggg ccgccccat tcttatgaaa atgtggactt ttggcaact ctggtgcgag ttttggactt ccattgatgt gctgtgcgtc acggccagca ttgagaccct gtgctgctgc </p>	Homo sapiens

52	640	Beta-2 adrenoceptor	NP_000015.1	<p>gcagtggatc gctacttttg cactacttca ctttcaagt accagagcct gctgaccaag aataaggccc gggatgatcat tctgatggg tggattgtgt caggccctac ctctctcttg ccattcaga tgcactggta ccgggccacc caccaggaag ccatcaactg ctatgccaat gagacctgt gtgactttct caggaacca gtctactcca ttgctctctc catcggtgctc ttctacgttc ccctgggtgat catggtcttc gctactcca ggtctcttca ggaggccaaa aggcagctcc agaagattga caaatctgag ggccgcttcc atgtccagaa ccttagccag gtggagcagg atgggaggac ggggcatgga ctccgcagat ctccaagt ctgcttgaag gagcacaag cctcaagac gtaggcac atcatgggca ctttaccct ctgctggctg ccctcttca tcgttaacat tgtgcatgtg atccaggata acctatccg taaggaaagt tacatctcc taaattggat aggcctatgc aattctggtt tcaatcccc tatctactgc cggagcccag atttcaggat tgcctccag gagcttctgt gctgcgcag gtctctcttg aaggcctatg ggaatggcta ctccagcaac ggcaacacag gggagcagag tggatatcac gtggaacagg agaaagaaa taaactgctg tgtgaagacc tcccaggac ggaagacttt gtgggccatc aggtactgt gcctagcgt aacattgatt caaaggag gaattgtagt acaaatgact cactgctgta aagcagttt tctacttita aagaccccc ccccccaac agaacactaa acagactatt taactgagg gtaataaact tagaataaaa ttgtaaaaa tgtatagaga tatgcagaag gaagggcac ctctgcctt ttttatttt ttaagctgta aaaagagaga aaacttattt gactgattat ttgttatttg tacagttcag tctctcttg catggaattt gtaagtttat gtctaaagag ctttagtctt agaggacctg agtctgctat atttctatga ctttccatg tatctacctc actattcaag tattaggggt aatatattgc tgctggtaat ttgtatctga aggagatttt cctctctaca ccttgagct tgaggatttt gagtatctcg gacctttcag ctgtgaacat ggaactcttc ccaactctc ttatttgctc acacggggta ttttaggcag gatttgagg agcagcttca gttgttttcc cgagcaaaag tctaaagtct acagtaata aatgtttga ccatg</p>	Homo sapiens
53	643	Beta-3 adrenoceptor	NM_000025	<p>FERLQTVINY FITSLACADL DHDVTQORDE VVVGMGIVM SLVLAIVFG NVLVITAIK P IETLCVIAVD RYFAITSPFK YQSLLTKNKA RVILMVIV SGLTSFLPIQ MHWYRATHQE AINCYANETC CDFFTNQAYA IASSIVSFYV PLVIMVFYS RVFQEAQRQL QKIDKSEGRF HVQNLSQVEQ DGRTHGLRR SSKFCLKEHK ALKTLGIIMG DFRIAFOELL IVNIVHVIQD NLIRKEVYIL LNWIGYVNSG FNPLIYCRSP QGTVPDNDID SQGRNCSTND SLL GEQSGYHVEQ EKENKLICED LPGTEDFVGH QGTVPDNDID SQGRNCSTND SLL gctactctc ccccaagagc ggtggcaccg agggagtgg ggtgggggga ggtgagcgc A tctggctggg acagctagag aagatggccc aggtgggga agtgcctctc atgccttgct gtccctccc ctgagccagg tgatttggga gacccctcc tctctctctt cctaccgccc ccacgcgcga cccggggatg gctccgtggc ctacagagaa cagctctctt gccccatggc cggacctccc caccctggcg cccaataccg ccaacaccag tgggctgcca ggggttccgt gggagggcgg cctagccggg gccctgctgg cgctggcgggt gctggccacc gtgggaggca acctgctggt catcgctggc atcgccctgga ctccgagact ccagaccatg accaacgtgt tcgtgacttc gctggccgca gccgacctgg tgatgggact cctggtggtg ccgccggcgg ccacctggc gctgactggc cactggccgt tgggcccac tggctgcgag ctgtggacct cggtggaagt gctgtgtgtg accgccagca tcgaaacctt gtgcgccctg gccgtggacc</p>	Homo sapiens

55	688	Opsin, blue- sensitive	NM_001708	<p>CRGRRRLPPE PCAAARPALF PSQVPAARSS PAQRLCQRL DGASWGVs</p> <p>ggcatccatg agaaaaatgt cggaggaaga gttttatctg ttcaaaaata tctcttcagt A</p> <p>ggggccgtgg gatggccctc agtaccacat tgccctctgc tgggctctct acctccaggc</p> <p>agctttcatg ggcactgtct tctttatagg gtcccaactc aatgccatgg tgcgtggtggc</p> <p>cacactgcgc tacaaaaagt tgcggcagcc cctcaactac attctggtca acgtgtcctt</p> <p>cggaggcttc ctctctgca tcttctctgt ctccctctgc ttcgtcgcca cgtgtaacgg</p> <p>atacttcgtc ttcggtcgcc atgtttgtgc tttggagggc ttcttgggca cgttagcagg</p> <p>tctggttaca ggatgggtcac tggccttctc ggcctttgag cgctacattg tcatctgtaa</p> <p>ggccttcggc aacttcgct tcaagtcctc ccatccacc ctcttttggc tggagccggt tcatccctga</p> <p>gaccattggt attggcgct tgcctgactg gtacacgtg ggcacaaaat accgcagcga</p> <p>ggcctgcag tgttctgtg tcatcttctg ctctctctgc cctctctccc tcatctgctt</p> <p>gtcctatagc tggttctctc tgcctgactg agctgttgca gctcagcagc aggagtcagc</p> <p>ctcctacact cagctgctga gggccctgaa cgcctggtg gttgtgagg taggatacctt</p> <p>tacgacccag aaggctgaac gggaggtgag cgcctggtg gttgtgagg taggatacctt</p> <p>ctgtgtctgc tacgtgacct acgcgccctt cgccatgtac atggtcaaca accgtaacca</p> <p>tgggctggac ttacgggcttg tcaccattcc ttcattcttc tccaagagtg cttgcactta</p> <p>caatcccatc atctactgct tcatgaataa gcaagtccaa gcttgcata tgaagatggt</p> <p>gtgtgggaag gccatgacag atgaatccga cacatgcagc tcccagaaa cagaagtctc</p> <p>tactgtctcg tctaccctga tgggccccaa ctgaggaccc atattggcc tgtttgcaac</p> <p>agctagaatt aaatttact t</p>	Homo sapiens
56	688	Opsin, blue- sensitive	NP_001699.1	<p>MRKMSEEFY LFKNISSVGP WDGPQYHIAP VMAFYLAQAF MGTVELIGFP LNAMVLVATL P</p> <p>RYKKLRQPLN YILNVVSFGG FLICIFSVFP VFVASCNGYF VFGRHVCALE GFLGTVAGLV</p> <p>TGWSLAFIAF ERYIVICKPF GNFRRSSKHA LTVVLATWTI GIGVSIPIPF GWSRFIPEGL</p> <p>QCSCGPDWYT VGTKYRSESY TWFLFIFCFI VPLSLICFSY TQLLRALKAV AAQQQESATT</p> <p>QKAEREVSRL VVMVGSFCV CYVPYAFAM YMVNNRNHGL DLRLVTIPSF FSKSACIYNP</p> <p>IIYCFMKNQF QACIMKVCV KAMTDESDTC SSQKTEVSTV SSTQVGNP</p> <p>gagtatctgg atgtcttga tttctctccc attctgttct gttctgttct cctaatacca A</p> <p>tctcgttact agacgtaggc attggacgtg acaatcaact gcatttgaac tgagaagaag</p> <p>aaatattaaa gacacagctc tcagaagaaa tggctcaaa ggcgcctcac tcacctaatc</p> <p>agactttaat ttcaatcaca aatgacacag aatcatcaag ctctgtggtt totaacgata</p> <p>acacaaaataa aggatggagc ggggacaaat ctccaggaa agaaagcattg tgtgcccatt</p> <p>atattactta tgcgtgtgac atttcagtg gcatccttgg aaatgctatt ctcatacaag</p> <p>tctttttcaa gacaaaatcc atgcaaacag ttccaaatat tttcatcacc agcctggctt</p> <p>ttggagatct tttaactctg ctaacttgtg tgcagtgga tgcaactcac taccctggcag</p> <p>aaggatggct gttcgggaaga attggttga aggtgctctc tttcatcgg ctcacttctg</p> <p>ttggtgtgtc agtgttcaca ttaacaattc tcagcgtga cagatacaag gcagtgtgta</p> <p>agccacttga gcgacagccc tccaatgcca tccctgaagac ttgtgtaaaa gctggctgcy</p> <p>tctggatcgt gctatgata ttgtctctac ctgaggctat attttcaaat gtatacactt</p> <p>ttcgagatcc caataaaaa atgacatttg aatcatgtac ctcttacct gtctctaaga</p> <p>agctcttgca agaaatacat tctctgtgtg gcttcttagt gttctacatt attccactct</p> <p>ctattatctc tgcctactat tctctgattg ctaggaccc ttaaaaaagc accctgaaca</p>	Homo sapiens
57	692	Bombesin Receptor Subtype-3	NM_001727		Homo sapiens

58	Bombesin Receptor Subtype-3	NP_001718.1	<p>tacctaactga ggaacaaagc catgcccgtg agcagattga atcccgaaag agaattgccg gaacgtattt ggtgttggtg gctctgtttg cctctgtgtg gttcgcaaat cactctctgt acctctacca ttcatctact tctcaaacct atgtagaccc ccttgccatg catttcattt tcaccatttt ctctcgggtt ttggctttca gcaattcttg cgtaaacccc ttgtctctct actggctgag caaaagcttc cagaagcatt ttaagctca gttgttctgt tgcaaggcgg agcggcctga gctctctgtt gctgacacct ctctaccac cctggctgtg atgggaacgg tccegggcac tgggagcata cagatgtctg aaattagtgt gacctgttc actgggtgta gtgtgaagca ggcagaggac agattctagc ttttcaagga aaaatgctgc ttctctctcc agcgtgtgta tccgactcta agctgtgtgc agg</p> <p>MAQRQPHSPN QTLISITNDT ESSSVVSND NTNKGWSDN SPGIEALCAI YITYAVIISV P GILGNAILIK VFFKTKSMQT VPNIFFITSLA FGDLLLLLTC VPVDATHYLA EGWLFGRIGC KVLGFIRLTS VGVSVFTLTI LSADRYKAVV KPLERQPSNA ILKTCVKAGC VWIVSMIFAL PEAIFSNVYT FRDPNKNMTF ESCTSYPSVK KLLQEIHSLL CFLVFIIPIL SIISVYYSLI ARTLYKSTLN IPTEEQSHAR KQIESRKRIA RTVLVLVALF ALCWLPNHLL YLYHSFTSQT YVDPNMFHI FTIFSRVLAF SNSCVNPFAL YWLSKSFQKH FKAQLFCCA ERPEPPVADT SLTLAVMGT VPGTGSIQMS EISVTSFTGC SVKQAEEDRF</p>	Homo sapiens
59	CXC Chemokine Receptor 5	NM_001716	<p>gctgccacct ctctagaggc acctggcggg gagcctctca acataagaca gtgaccagtc A tggtgactca cagccggcac agccatgaac tacccgctaa cgctggaaat ggacctcgag aacctggagg acctgttctg ggaactggac agattggaca actataacga cactctcctg tgggaaatc atctctgcc tggcacagag gggccctca tggcctcctt caaggccctg ttcgtgcccg tggcctacag ctctatcttc gctcgggagc tgatcggcaa cgtcctgggtg ctggtgatcc tggagcggca cggcagaca cgcagttcca cggagacctt cctgttccac ctggccgtgg ccgacctcct gctggtcttc atcttgccct ttgccgtggc cgagggtctt gtggcctggg tctcctctgc ctccctctgc aaaaactgtga ttgccctgca caaagtcaac ttctactgca gcagcctgct cctggcctgc atgcctgtgg accgctacct ggccattgtc cagccgttcc atgcttaccg ccaccgcgc ctctctctca tccacatcac ctgtgggacc atctggctgg tgggcttctt ccttgccctg ccagagattc tcttcgcaa agtcagccaa ggccatcaca acaactcctt gccacgttg cccttctccc aagagaacca agcagaaacg catgctggtt tcacctcccg attcctctac catgtggcgg gattcctgct gccatgctg gtgatgggct ggtgctacgt gggggtagt cagaggttgc gccaggccca gggcgccct cagcggcaga aggcagtcag ggtggccatc ctggtgacaa gcattctctt cctctgtggtg tcacctacc acatcgtcat ctctcggac acctggcga ggtgaaggc cgtggacaaat acctgcaagc tgaatggctc tctccccgtg gccatcaca tgtgtgagtt cctgggcttg gcccactgct gcctcaacc catgctctac accttcgccc gctgaagt cgcagctgac ctgtgcggc tccagacgaa gctgggctgt accggccctg cctccctgtg ccagctcttc cctagctggc gcaggagcag tctctctgag tcaagagaatg ccacctctct caccacgttc taggtcccaag tgtccctttt tattgctgct ttctctgggg gcaggcagtg atgtggatg ctccttccaa caggagctgg gatcctaagg gctcaccgtg gctaagagtg tcttaggagt atcctcattt ggggtagcta gaggaaccaa ccccatctc tagaacatcc ctgccagctc ttctgcggc cctggggcta ggctggagcc caggagcgg aaagcagctc aaaggcacag tgaaggctgt ccttaccat ctgcacccc ctgggctgag agaacctcac gcacctccca</p>	Homo sapiens

60	729	CXC Chemokine Receptor 5	NP_001707.1	<p> tccataatcat ccaatgtctca agaaacaaact tctacttctg ccttgccaa cggagagcgc ctgcccctcc cagaacacac tccatcagct tagggctgc tgacctccac agcttccct ctctctctct gccacactgt caaacaagc cagaagctga gcaccagggg atgagtggag gttaaggctg aggaagggc agctggcagc agagtgtggc cttcggacaa ctgagtcctt aaaaacacag acattctgcc aggcccccaa tcttgacaa agcagggaagc tcagactggt tagttcagg tagctgcccc ggctgcagc gaaacacagc ctgggtccac cccatgtcac cggatcctgg gtggtctgca ggcagggtgc actctagggt ccttgaggg ccagccagt acctgaggaa gcgtgaaggc cgagaagcaa gaaagaaacc cgacagaggg aagaaaagag cttcttccc gaaccccaag gagggagatg gatcaatcaa acccggcgtt ccctccgcc agcgagatg gggtggggtg gagaactcct aggttggtg ggtccagggt atgggaggtt gtggcattg atgggaagg aggtgggtt gtccccctt cactccctt ccataagcta tagaccgag gaaactcaga gtgggaacgg agaaaggtg actggaagg gcccgtgga gtcatctcaa ccatccctc cgtggcatca ccttaggcag ggaagtgtaa gaaacacact gaggcaggga agtccccagg cccaggaag ccttgccctg cccccgtgag gatgtcactc agatggaacc gcagggaagt gctcctggt tgttgctca cctgggtgt gggaggcccg tccggcagtt ctgggtgctc cctaccact cccagcctt tgatcaggtg gggagtcagg gacccctgcc cttgtccac tcaagccaag cagccaagct ccttgaggg ccccactggg gaaataacag ctgtggctca cgtgagatg tctcacggc aggacaacga ggaagcccta agacgtccct tttttctctg agtatcctc cgaaagctgg gtaatcgatg gggagtcctg aagcagatgc aaagaggcaa gaggtggat tttgaatttt ctttttaata aaaaggcacc tataaacag gtcaatacag tacaggcagc acagagaccc ccggaacaa cctaaaaatt gttcaaaat aaaaaccaa agatgtctt caaaaaaa aaaaaaaa aaa </p>	Homo sapiens
61	735	C-C Chemokine Receptor 1	NM_001295	<p> ggcacgagcc cagaaacaaa gacttcaagg acaaaagtccc ttggaaccag agagaagccg A ggatggaac tccaaacacc acagaggact atgacacgac cacagagttt gactatggg atgcaactcc gtgccagaag gtgaacgaga gggccttttg ggcacaaact ctgccccctc tgtactcctt ggtattgtc attggcctgg ttggaacat cctggtggtc ctggtccttg tgcaatacaa gaggtacaaa aacatgacca gcatctacct cctgaacctg gccatttctg acctgctctt cctgttcacg cttcccttctt ggtcgcacta caagtgaag gatgactggg tttttgggta tgccatgtgt aagatcctct ctgggtttta ttacacaggc ttgtacagcg agatcttttt catcatcctg ctgacgattg acaggtaacct ggcacatcgc cagccgtgt ttgacctgcy ggcacggacc gtcaactttt gtgtcatcac cagcatcgc atttgggccc tggccatctt ggcttccatg ccaggcttat actttccaa gacccaatgg gaattcactc accacacctg cagccttcac ttctctcagc aaagcctacg agagtgaag ctgtttcagg </p>	Homo sapiens

62	735	C-C Chemokine Receptor 1	NP_001286.1	ctctgaaact gaacctcttt gggctgggtat tgcctttgtt ggtcatgata atctgtcata cagggattat aaagattctg ctaagacgac caaatgagaa gaaatccaaa gctgtccgtt tgatttttgt catcatgata atcttttttc tctttttgac ccctacaat ttgactatac ttatttttgt ttccaagac ttctgtttca ccatgagtg tgagcagagc agacatttgg acctggctgt gcaagtacg gaggatgacg cctacacgca ctgctgtgtc aaccagtg tctacgcctt cgttggtgag aggttccgga agtacctcg gacaggttgc cacagcgtg tggtgtgca cctgggttaa tggctccctt tctctccg gacaggttgc gagagggtca gtccacatc tccctccaca ggggagcatg aactctctgc tgggttctga ctcagacct aggaggccaa cccaaaataa gcaggcgtga cctgccaggc acactgagcc agcagcctgg ctctccagc caggttctga ctctggcac agcatggagt cacagccact tgggatatag agggaatgta atggtggcct gggccttctg agccttctgg ggcttcagtc tttccatga acttctccc tggtagaag aagatgaatg agcaaaacca aatattccag agactgggac taagtgtacc agagaagggc ttggactcaa gcaagatttc agatttga cctattagcat ttgtcaaca agtcaaccac ttcccactat tcttgctaca aaccaattaa acccagtagt ggtgactgt ggtccattc aaagttagct cctaaagcat gggagacat gatgtatgag gaatttctgt tcttccatca cctccccccc cccgcccac tcccactgcc aagaacttgg aaatagtgt ttccacagt actccactct gactccaga gccaatcagt agccagcatc tgctccctt tcactccac cgcaggattt gggctcttgg aatcctggg aacatagaac tcatgacgga agagttgaga cctaacgaga aatagaatg ggggaactac tctggcagc ggaaactaaga aagcccttag gaagaatttt tataccact aaaaataaac aattcagga gtgggctaag cacgggcat atgaataaca tgggtgtgctt cttaaaatag cctaaaggg gagggactca tcaattccat ttacccttct ttctgacta tttttcagaa tctctctct tttcaagtgt ggtgatagt tggtagattc taatggcttt attgcagcga ttaataacag gcaaaaggaa gcagggttgg tttcccttct ccatcttga ctgtcagca aaaaaaaa aaaaa atgggtcaga gttccgactg ccatcttga cttgtcagca aaaaaaaa aaaaa atgggtcaga gttccgactg ccatcttga cttgtcagca aaaaaaaa aaaaa METPNTTETY DTTTEFDYGD ATPCQKNER AFGAQLLPPL YSLVFVIGLV GNILVVLV P QYKRLKNMTS IYLLNLAISD LFLFTLPFW IDYKLKDDMV FGDAMCKILS GFYTGILYSE IFFIILLTID RYLAIVHAVF ALRARTVTFG VITSIIWAL AILASMPGLY FSKTQWEFTH HTCSLHFPHE SLREWKLFQA LKLNLFGLVL PLLVMIICYT GIILKILRRP NEKSKAVRL IFVIMIIFFL FWTPYNLTIL ISVFQDFLEF HECEQSRHLD LAVQVTEVIA YTHCCVNPVI YAFVGERFRK YLRQLFHRV AVHLVKWLPE LSVDRLEVS STSPSTGEHE LSAGF tttttcttct tctatcacag ggagaagtga aatgacaacc tcactagata cagttgagac A ctttgtacc acatcctact atgatgactg gggcctgctc tgtgaaaaag ctgataccag agcactgatg gcccagtttg tgeccccgct gtactccctg tgttccactg tgggctctt gggcaatgtg gtgggtggtga tgatectcat aaaaatacag aggtcccgaa ttatgaccaa catctacctg ctcaacctgg ccatttcgga cctgtctctc ctgctcacc ttccattctg gateccactat gtcagggggc ataactgggt ttttggccat ggcattgtga agctcctctc agggttttat cacacaggct tgtacacgga gatctttttc ataactctgc tgacaatcga caggtacctg gccattgtcc atgctgtgtt tgcctctcga gcccggactg tcaatttgg tgtcatcacc agcatgtca cctggggcct ggcagtgcta gcagctctc ctgaatttat cttctatgag actgaagagt tgttgaaga gactcttgc agtgccttt acccagagga	Homo sapiens
63	737	C-C Chemokine Receptor 3	NM_001837	ctctgaaact gaacctcttt gggctgggtat tgcctttgtt ggtcatgata atctgtcata cagggattat aaagattctg ctaagacgac caaatgagaa gaaatccaaa gctgtccgtt tgatttttgt catcatgata atcttttttc tctttttgac ccctacaat ttgactatac ttatttttgt ttccaagac ttctgtttca ccatgagtg tgagcagagc agacatttgg acctggctgt gcaagtacg gaggatgacg cctacacgca ctgctgtgtc aaccagtg tctacgcctt cgttggtgag aggttccgga agtacctcg gacaggttgc cacagcgtg tggtgtgca cctgggttaa tggctccctt tctctccg gacaggttgc gagagggtca gtccacatc tccctccaca ggggagcatg aactctctgc tgggttctga ctcagacct aggaggccaa cccaaaataa gcaggcgtga cctgccaggc acactgagcc agcagcctgg ctctccagc caggttctga ctctggcac agcatggagt cacagccact tgggatatag agggaatgta atggtggcct gggccttctg agccttctgg ggcttcagtc tttccatga acttctccc tggtagaag aagatgaatg agcaaaacca aatattccag agactgggac taagtgtacc agagaagggc ttggactcaa gcaagatttc agatttga cctattagcat ttgtcaaca agtcaaccac ttcccactat tcttgctaca aaccaattaa acccagtagt ggtgactgt ggtccattc aaagttagct cctaaagcat gggagacat gatgtatgag gaatttctgt tcttccatca cctccccccc cccgcccac tcccactgcc aagaacttgg aaatagtgt ttccacagt actccactct gactccaga gccaatcagt agccagcatc tgctccctt tcactccac cgcaggattt gggctcttgg aatcctggg aacatagaac tcatgacgga agagttgaga cctaacgaga aatagaatg ggggaactac tctggcagc ggaaactaaga aagcccttag gaagaatttt tataccact aaaaataaac aattcagga gtgggctaag cacgggcat atgaataaca tgggtgtgctt cttaaaatag cctaaaggg gagggactca tcaattccat ttacccttct ttctgacta tttttcagaa tctctctct tttcaagtgt ggtgatagt tggtagattc taatggcttt attgcagcga ttaataacag gcaaaaggaa gcagggttgg tttcccttct ccatcttga ctgtcagca aaaaaaaa aaaaa atgggtcaga gttccgactg ccatcttga cttgtcagca aaaaaaaa aaaaa atgggtcaga gttccgactg ccatcttga cttgtcagca aaaaaaaa aaaaa METPNTTETY DTTTEFDYGD ATPCQKNER AFGAQLLPPL YSLVFVIGLV GNILVVLV P QYKRLKNMTS IYLLNLAISD LFLFTLPFW IDYKLKDDMV FGDAMCKILS GFYTGILYSE IFFIILLTID RYLAIVHAVF ALRARTVTFG VITSIIWAL AILASMPGLY FSKTQWEFTH HTCSLHFPHE SLREWKLFQA LKLNLFGLVL PLLVMIICYT GIILKILRRP NEKSKAVRL IFVIMIIFFL FWTPYNLTIL ISVFQDFLEF HECEQSRHLD LAVQVTEVIA YTHCCVNPVI YAFVGERFRK YLRQLFHRV AVHLVKWLPE LSVDRLEVS STSPSTGEHE LSAGF tttttcttct tctatcacag ggagaagtga aatgacaacc tcactagata cagttgagac A ctttgtacc acatcctact atgatgactg gggcctgctc tgtgaaaaag ctgataccag agcactgatg gcccagtttg tgeccccgct gtactccctg tgttccactg tgggctctt gggcaatgtg gtgggtggtga tgatectcat aaaaatacag aggtcccgaa ttatgaccaa catctacctg ctcaacctgg ccatttcgga cctgtctctc ctgctcacc ttccattctg gateccactat gtcagggggc ataactgggt ttttggccat ggcattgtga agctcctctc agggttttat cacacaggct tgtacacgga gatctttttc ataactctgc tgacaatcga caggtacctg gccattgtcc atgctgtgtt tgcctctcga gcccggactg tcaatttgg tgtcatcacc agcatgtca cctggggcct ggcagtgcta gcagctctc ctgaatttat cttctatgag actgaagagt tgttgaaga gactcttgc agtgccttt acccagagga	Homo sapiens

64	737	C-C Chemokine Receptor 3	NP_001828.1	<p> tacaagtatat agctggaggc attccacac tctgagaatg accatcttct gtctcgttct cctctgctc gttatggcca tctgtacac agaatcttc aaaaagctgc tgaggtgccc cagtaaaaa aagtacaagg ccatccggct ctttttctc ataatggcgg tgttttctat tttctggaca cctacaatg tggctatctt tctctcttc tatcaatcca tcttatttgg aaatgactgt gagcggagca agcatctgga cctggctcatg ctggtgacag aggtgatcgc ctactccac tctgcatga accgggtgat ctacgccttt gtggagaga ggtccggaa gtacctgcg cactcttcc acaggcactt gctcatgcac ctgggcagat acatcccat ccttcctagt gagaagctgg aaagaaccag ctctgtctct ccatccacag cagagccgga actctctatt gtgttttagg tcagatgcag aaaaatgcct aaagagggaag gaccaaggag atgaagcaaa cacattaagc ctccacact cactctaaa acagtcttc aaacttccag t </p>	Homo sapiens
65	738	C-C Chemokine Receptor 4	NM_005508	<p> KYRRLRIMTN IYLLNLAISD LLFLVTLPEW IHYVRGHNWV FGHGMCKLLS GFYHTGLYSE IFFIILLTID RYLAIVHAVF ALRARTVTFG VITSIVTWGL AVLAALPEFI FYETEELFEE TLCSALYPED TVYSWRHFHT LRMTIFCLVL PLLVMAICYT GIITLLRCP SKKYYKAIRL IFVIMAVFEI FWTPYNVAIL LSSYQSILFG NDCERSKHL LVMILVTEVIA YSHCCMNPVI YAFVGERFRK YLRHFFHRHL LMHLGRYIPF LPSEKLETS SVSPSTAEPE LSIVF cgggggtttt gatcttcttc cctctctttt ctccctctt tctctctctt cctccctccc A tctctcattt cctctctctt tctccctcag tctccacatt caacattgac aagtccattc agaaaagcaa gctgcttctg gttgggcccc gacctgcctt gaggagcctg tagagttaaa aaatgaaccc caggatata gcagatacca cctcgcgatg aagcatatac agcaattact atctgtatga aagtatcccc aagccttgca ccaaagaagg catcaaggca tttggggagc tcttctgccc cccactgtat tcttgggttt ttgtatttgg tctgcttggg aattctgtgg tggttctggt cctgttcaaa tacaagcggc tcaggtccat gactgatgtg tactgtctca acctgcccac ctggatctg ctctctgtgt tttccctccc ttttggggc tactatgcag cagaccagtg gggttttggg ctaggctctg gcaagatgat tctctggatg tacttgggtg gcttttacag tggcatattc ttgtcatgc tcatgagcat tgatagatac ctggcgatag tgcacgcggt gtttctcttg agggcaaggc ccttgactta tggggctcatc accagtttgg ctacatggtc agtggctgtg ttcgctccc ttcctggctt tctgttcagc acttgttata ctgagcgcaa ccatacctac tgcaaaacca agtactctct caactccacg acgtggaaag ttctcagctc cctggaaatc aacattctcg gattgggtgat ccccttaggg atcatgctgt ttgtctactc catgatcatc aggaacctgc agcatgttaa aatgagaag aagaacaagg cggtgaaagt gatctttgccc gtggtggctc tctctcttgg ttcttgga ccttacaaca tagtctctt cctagagacc ctggtggagc taagaactct tcaggactgc acctttgaaa gatacttga ctatgccatc caggccacag aaactctggc tttgtttcac tgcgtcctta atcccatcat ctactttttt ctgggggaga aatttcgcaa gtacatccta cagctcttca aaacctgcag gggccttttt gtgctctgccc aatactgtgg gctctccaa atttactctg ctgacacccc cagctcatct tacacgcagt ccacctgga tcatgatctt catgatgctc tgtaggaaaa atgaaatgggt gaaatgcaga gtcaatgaac tttccacat tcagagctta ctttaaaatt ggtattttta ggtaagagat ccttgagcca gtgtcaggag gaaggcttac acccacagtg gaaagacagc ttctcatctt gcaggcagct tttctctcc cactagacaa </p>	Homo sapiens

66 738 C-C NP_005499.1 Homo sapiens

Chemokine
Receptor 4

67 741 C-C NM_001838 Homo sapiens

Chemokine
Receptor 7

gtccagcctg gcaaggggtc acctgggctg aggcctcctt cctcacacca ggttgctg
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VLVLFKYKRL RSMTDVYLLN LAISDLLFV SLPFWGYAA DQWVFLGLC KMISWMLVG
FYSGIFFVML MSIDRYLAIV HAVFSLRART LTYGVITSLA TWSVAVFASL PGFLFSTCYT
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agcgtcatgg acctggggaa accaatgaaa agcgtgctgg tgggtggctct ccttgctcatt
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cttgccgcgt cgcctccca ggtcttcaac aggggagagt gtggtgtttc ctgcaggcca

68	741	C-C Chemokine Receptor 7	NP_001829.1	<p>ggccagctgc ctccgctga tcaagccac actctgggt ccagagtggg gatgacatgc actcagctct tggctccact gggatgggag gagaggacaa gggaaatgtc agggcgggg agggtagacag tggccgccc aggccacgag ctgtgtcttt ttctttgtc acagggactg aaaacctctc ctcatgttct gctttcgatt cgttaagaga gcaaatattt acccacacac agataaagtt ttcccttgag gaaacaacag ctttaaaa</p> <p>MDLGKPMKSV LVALLVIFQ VCLQDEVTD DYIGDNTTVD YTLFESILSK KDVNFKAWF P LPIMYSIICF VGLLGNGLV LTYIEKRLK TMTDTYLLNL AVADILFLT LPFWAYSAAK SWVFGVHFEK LIFAIYKMSF FSGMLLLICI SIDRYVAIVQ AVSAHRHRAR VLLISKLSCV GIWILATVLS IPELLYSDLQ RSSEQAMRC SLITEHVEAF ITIQVAQWVI GFLVPLLAMS FCYLVIIRTL LQARNFERNK AIKVIIAVW VFIVFQLPYN GVVLAQTVAN FNITSSTCEL SKQLNIAYDV TYSLACVRCC VNPFLYAFIG VKFRNDLFKL FKDLGCLSQE QLRQWSSCRH IRSSMSVEA ETTTTFSP</p>	Homo sapiens
69	742	C-C Chemokine Receptor 8	AI733823	<p>TTTAAATTTA AAAACTTTAT TGGAAATAGCA TGTTAGCAGC AGTGAACAGG GCATGGCACA A GAAGGTTTCC AAAACAAGTT TAGCATGAAG GATGCCATAT GCTGTTGCCA ACAACTAGAA CAGGGTGACT AAAGACACAG TTCTGAATGT CCAGCACAAAC CTCTGGCCTG CAACATATGTT CAGTGATGAT GATAAACAG GTGGTGACTT GGAAGGAATC CCTATGTCAA GTGAGAAAAA AAAATGATGT CTGACCTCCT TATATATGTA AAAATATAC CTTCAGAGTC CGTCAGTAAG CTGGAAGAAG TGGATGTGA AGTTTTTAAC ATCGATGATG GGTCTCCAGT TGTTCATCAA CCCATGGTGA AATAGCTGAA CGGTCTTGAA TCAAAGGTGA TCCTAATAGT GAAGACATTA ACATTGCAGA AAAAGTGCT ACAGATTATA TGGTGAATAT ACCTGATGGG CTTCCTTGAAG GACTAGAGCA GTGTGTATTC AAAACAGAAC AAGAAATCAG GTCAGTTTAT TGCCAAATAT GCTGTTGCCA ACACCTAGAA CACAATGACT GGAGACACAG TTGTGCGTGC A CTGGCACAAAC CTCAGGCTG TGTCTATGTT CAGTGATGAT GATGAGCAAG GTGGTGACTT TGAAGGATTT TGTATATCAA GTGAAAAGAA ATGATATCTG ACCTCCTTAC ATATCTAAAA CATATACCTT CAAATCCAT CAATAAGCTG AAAGAAATAG ATATCAAAGA ATATTTTAAAC ATCATTAATG AGGCTCCAGT TATTCATTCA TTGACCAATG GTAATATAGC TGAATGATT CTGAATCAAG CTGATTATGA TAATAGTAT GATGAAGATG ATGTTAATAC TGCAGAAAAA GTGCCTATAA ATGACACAGT GAAAA</p>	Homo sapiens
70	742	C-C Chemokine Receptor 8	LG6770	<p>ctccagagag gctgctgctc attgagctgc actcacatga ggatacagac tttgtgaaga A aggaattggc aacactgaaa cctccagaac aaaggctgtc actaagggtcc cgctgccttg atggattata cactgacct cagtgtaga acagtgaccg actactacta ccttgatatac ttctcaagcc cctgtgatgc ggaacttatt cagacaaatg gcaagtgtgt ccttgctgtc ttttattgcc tctgtttgt attcagtctt ctgggaaaca gctgtgtcat cctggctctt gtggtctgca agaagctgag gagcatcaca gatgtatacc tcttgaacct ggcctgtctt gacctgcttt ttgtcttctc ctccccctt cagacctact atctgtgga ccagtggtg tttgggactg taatgtgcaa agtgggtgtc gctttttatt acattggctt ctacagcagc atgtttttca tcacctcat gagtgtggac aggtacctgg ctgttgtcca tgcctgtgat gccctaaagg tgaggacgat caggatgggc acaacgctgt gcctggcagt atggctaacc gccattatgg ctacctccc attgctagt ttttaccagg tggcctctga agatgggtgt ctacagtgtt attcatctta caatcaacag actttgaagt ggaagatctt caccacttc aaaatgaaca ttttaggctt gttgatccca ttccacctct ttatgttctg ctacattaaa</p>	Homo sapiens
71	742	C-C Chemokine Receptor 8	NM_005201		Homo sapiens

72	742	C-C Chemokine Receptor 8	NP_005192.1	<p>atcctgcacc agctgaagag gtgtcaaaac cacaacaaga ccaaggccat caggttggtg</p> <p>ctcatgttg tcatgtcatc ttacttttc tgggtcccat tcaacgtggt tcttttcctc</p> <p>acttcttgc acagtatgca catcttggaat ggaatagca taagccaaca gctgacttat</p> <p>gccaccatg tcacagaaat catctctttt actcactgct gtgtgaaccc tgttatctat</p> <p>gcttttgtg gggagaagt caagaaacac ctctcagaaa tatttcagaa aagttgcagc</p> <p>caaatctca actactagg aagacaaatg cctagggaga gctgtgaaaa gtcactatcc</p> <p>tgccagcagc actcctccc tctctccagc gttagactaca tttgtgagg atcaatgaag</p> <p>actaaatata aaaaacattt tcttgaatgg catgctagta gcagtgcagc aaggtgtggg</p> <p>tgtgaaagg ttccaaaaaa agttcagcat gaagatgcc atatatgttg ttgccaacac</p> <p>ttaaaacaca atgactggag acatagtgt gcatgcctgg cacaacatca agcctgtgat</p> <p>tgtgtttat gatgatgtg acaaatgtgt aactttaag gattctgtat gccaaagtga</p> <p>aaaaaagat gctgacctc ctcatatgc aaaaatatac cttcagagac tgtcagtagg</p> <p>ctggaagaag tggatatgga agttttgaca tgaatcaagg ggtccagtt gcttatgcat</p> <p>tgactgatgg tgaatggct ggaatgattc tgaatcaagg tgattgtgat tatagtaca</p> <p>atgaagatga tgcattaat actgcataaa aagtcctgt agatgacatg gtgaaaaat</p> <p>ttgacaggct tatggaagga ctacagcagc acgcatctat aacagaacaa gaaattatct</p> <p>cagcttataa aatcaaacag agacttctag aaaaaacca ttgttgatga ggcagatgcc</p> <p>tctagaagag acgtttaaaa gccatcaaac acaatgcctc atcttccctg gaggacccac</p> <p>ttcctgatcc ctcaactgtg tctgatgttt ctctcatgt agaaaaataa aaataaaaaat</p> <p>aaaaaaatat atattggtat gtaactacag gaaaaaata aaaaaatat agtgacagat</p> <p>aacctttcaa tcaaaactca gtatcataag tagagactga aaacttgccg ttattgattg</p> <p>ttgttattaa cagctgatac aggtattctg ctgatgtctac tgctgcctag ttaccatgaa</p> <p>caggtttttt cactattaat ggtgcgtcat attttttact tttaaagtact tacgtgtgag</p> <p>taagtgtgag aaaaatgattg cttatcagta gtatcaatga tttactcaat atctgaatca</p> <p>ccttgattca gaaccattc agctgtttca ccatcagta atgaataaca gcctcattga</p> <p>tgtcaaaaac tcaatatcc acttctttca gcctactgta gactctggaa gtatactttt</p> <p>tgcataatga aggaagtcag atttttttt</p>	Homo sapiens
73	752	CXC Chemokine Receptor 3	NM_001504	<p>atcctgcacc agctgaagag gtgtcaaaac cacaacaaga ccaaggccat caggttggtg</p> <p>ctcatgttg tcatgtcatc ttacttttc tgggtcccat tcaacgtggt tcttttcctc</p> <p>acttcttgc acagtatgca catcttggaat ggaatagca taagccaaca gctgacttat</p> <p>gccaccatg tcacagaaat catctctttt actcactgct gtgtgaaccc tgttatctat</p> <p>gcttttgtg gggagaagt caagaaacac ctctcagaaa tatttcagaa aagttgcagc</p> <p>caaatctca actactagg aagacaaatg cctagggaga gctgtgaaaa gtcactatcc</p> <p>tgccagcagc actcctccc tctctccagc gttagactaca tttgtgagg atcaatgaag</p> <p>actaaatata aaaaacattt tcttgaatgg catgctagta gcagtgcagc aaggtgtggg</p> <p>tgtgaaagg ttccaaaaaa agttcagcat gaagatgcc atatatgttg ttgccaacac</p> <p>ttaaaacaca atgactggag acatagtgt gcatgcctgg cacaacatca agcctgtgat</p> <p>tgtgtttat gatgatgtg acaaatgtgt aactttaag gattctgtat gccaaagtga</p> <p>aaaaaagat gctgacctc ctcatatgc aaaaatatac cttcagagac tgtcagtagg</p> <p>ctggaagaag tggatatgga agttttgaca tgaatcaagg ggtccagtt gcttatgcat</p> <p>tgactgatgg tgaatggct ggaatgattc tgaatcaagg tgattgtgat tatagtaca</p> <p>atgaagatga tgcattaat actgcataaa aagtcctgt agatgacatg gtgaaaaat</p> <p>ttgacaggct tatggaagga ctacagcagc acgcatctat aacagaacaa gaaattatct</p> <p>cagcttataa aatcaaacag agacttctag aaaaaacca ttgttgatga ggcagatgcc</p> <p>tctagaagag acgtttaaaa gccatcaaac acaatgcctc atcttccctg gaggacccac</p> <p>ttcctgatcc ctcaactgtg tctgatgttt ctctcatgt agaaaaataa aaataaaaaat</p> <p>aaaaaaatat atattggtat gtaactacag gaaaaaata aaaaaatat agtgacagat</p> <p>aacctttcaa tcaaaactca gtatcataag tagagactga aaacttgccg ttattgattg</p> <p>ttgttattaa cagctgatac aggtattctg ctgatgtctac tgctgcctag ttaccatgaa</p> <p>caggtttttt cactattaat ggtgcgtcat attttttact tttaaagtact tacgtgtgag</p> <p>taagtgtgag aaaaatgattg cttatcagta gtatcaatga tttactcaat atctgaatca</p> <p>ccttgattca gaaccattc agctgtttca ccatcagta atgaataaca gcctcattga</p> <p>tgtcaaaaac tcaatatcc acttctttca gcctactgta gactctggaa gtatactttt</p> <p>tgcataatga aggaagtcag atttttttt</p>	Homo sapiens

74	CXC Chemokine Receptor 3	NP_001495.1	<p>gagccctcct gctggcctgc atcagcttg accgctacct gaacatagtt catgccaccc agctctaccg cggggggccc cggcccgccg tgacctcac ctgctgggt gtctgggggc tgtgctgct ttctggccctc ccagacttea tcttctctgc ggcccaaccac gacgagcgcc tcaacgccac ccaactgcaa tacaacttc cacagtggtg cgcacaggct ctgctgggtgc tgacgtggt ggctggcttt ctgctgccc tgctggctcat ggctactgc tatgccaca tctggccgt gctgctggt tccaggggcc ageggcgct gggggccatg cggctgggtg tgggtgctgt ggtggccttt gccctctgt ggaccccta tcaactgggt gtgctgggtg acatcctcat ggacctgggc gctttggccc gcaactgtg ccgagaaagc aggtagacg tggccaaagtc ggtcacctca ggctgggct acatgcactg ctgctcaac ccgctgctct atgcctttgt aggggtcaag ttccgggagc ggatgtggat gctgctcttg cgcctgggt gccccacca gagagggtc cagaggcagc catgctctc cggccggat tcatcctggt ctgagacct agaggcctcc tactcgggt tctgaggcgg gaatccgggc tcccctttcg ccacagctct gacttccccg cattccaggc tctcctcc cctgcccgc tctgctctc cccaatatcc tgcctcccg gactcactg cagccccagc accaccaggt ctcccggaa gccacctcc cagctctgag gactgcacca ttgctgctcc ttagctgcca agccccatcc tgccgccga ggtggctgcc tggagcccca ctgcccctct cattggaaa ctaaaacttc atcttcccca agtgcgggga gtacaaggca tggcgtagag ggtgctgccc catgaagcca cagccaggc ctccagctca gcagtactg tggccatggt ccccaagacc tctatatattg ctcttttatt ttatgtcta aaatcctgct taaaacttt caataaaca gatcgtcagg accaaaaaa aaaaaaaa aaaaaaaa aaaaaaaa aaaaaaaa</p>	Homo sapiens
75	CXC Chemokine Receptor 4	NM_003467	<p>gtttgttggc tgcggcagca ggtagcaaa tgacgccag ggctgagtg ctccagtagc A caccgcatct ggagaaccag cggttaccat ggaggggatc agtatataca cttcagataa ctacaccgag gaaatgggt caggggacta tgactccatg aaggaacctt gttccgtga agaaaatgct aattcaata aaatcttct gccaccatc tactccatca tcttcttaac tggcattgtg ggaatggat tggctatcct ggtcattggt taccagaaga aactgagaag catgacggac agtacaggc tgcacctgtc agtggccgac ctctcttttgc tcatcacgt tcccttctgg gcagttgat cgtgggcaa ctggtacttt gggaacttcc tatgcaaggc agtccatgtc atctacacag tcaacctcta cagcagtgct ctcactctgg ccttcatcag tctggaccgc tacctggcca tctgccacgc caccacacgt cagaggccaa ggaagctgtt ggctgaaaag gtggtctatg ttggcgtctg gatccctgccc ctctgctga ctatcccg cttcatcttt gccacgtca gtgaggcaga tgacagatat atctgtgacc gcttctaccc caatgacttg tgggtggttg tgttccagtt tcagcacatc atggttggcc ttatcctgcc tgggtattgtc atctgtcct gctattgcat tatcatctcc aagctgtcac actccaaagg ccaccagaag cgaaggccc tcaagaccac agtcatctcc atcttggtt tcttgcctg</p>	Homo sapiens

76	CXC Chemokine Receptor 4	NP_003458.1	<p>ttggctgctt tactacattg ggatcagcat cgactccttc atcctcctgg aaatcatcaa gcaagggtgt gattttgaga acactgtgca caagtggatt tccatcacgg aggccttagc ttcttccac tgtgtctga acccatcct ctatgcttcc cttggagcca aatttaaaac ctctgcccag cagcactca cctctgtgag cagagggtcc agcctcaaga tccctcccaa aggaagcgga ggtgacatt catctgttcc cactgagtct gactcttcaa gtttccactc cagctaacc agatgtaaaa gacttttttt tatacgataa ataacttttt ttaagttac acatttttca gatataaaag actgaccaa atgtacagat tttatgtgct tgttggattt ttgtcttgtg tttcttttagt ttttgtgaag ttttaattgac ttatttatat aaattttttt tgtttcatat tgatgtgtgt ctaggcagga cctgtggcca agtctctagt tgctgtatgt ctcgtggtag gactgtagaa aagggaactg aacattccag agcgttagt gaatcacgta aagctagaaa tgatccccag ctgtttatgc atagataatc tctccattcc cgtggaactg tttctcgtgt cttaaagact gattttgtgt tagaagatgg cactataaac caaagcccaa agtgtatag aaatgctggt ttttcagttt tcaggagtgg gttgatttca gcacctacag tgtacagtct tgtattaagt tgttaataaa agtacctgtt aaacttactt agtgttatg MEGISIYTS D NYTEEMGSGD YDSMKPCFR EENANFNKIF LPTYSIIFL TGIVGNGLVI P LVMGYQKKLR SMTDKYRLHL SVADLLFVIT LPFWAVDAVA NWYFGNLFCK AVHVIYTVNL YSSVLILAFI SLDRYLAIHV ATNSQRPRL LAEKVVYGV WIPALLTIP DFIFANVSEA DDRYICDRFY PNDLWVVFQ FQHIMVGLIL PGVILSCYC IISKLHSHK GHQKRKALKT TVILILAFFA CWLPYVIGIS IDSFILLEII KQCEFENTV HKWISITEAL AFFHCCLNPI LYAFLGAKFK TSAQHALTSV SRGSSLKILS KGRRGGHSSV STESESSFH SS</p>	Homo sapiens
77	Complement Component 3a Receptor 1	NM_004054	<p>atggcgtctt tctctgtgga gaccaattca actgacctac tctcacgac atggaatgag A ccccagtaa tctctccat ggtcattctc agccttactt ttttactggg attgccaggc aatggcgctg tgcctgggtt ggctggcctg agactgagc ggacagtga cacaatttgg ttctccacc tcacctggc ggacctcctc tgcctcctct ccttgccctt ctcgctggct cacttggctc tcaggggaca gtggccctac ggacagttcc tatgeaagt catccctcc atcattgtcc tcaacatgtt tgccagtgc tctctgctta ctgccattag cctggatcgc tgtcttgtgg tattcaagcc aatctggtgt cagaatcatc gcaatgtagg gatggcctgc tctatctgtg gatgatctg ggtggtggct ttgtgtatgt gcattcctgt gttcgtgtac cgggaaatct tcactacaga caaccataat agatgtggct acaaatgtgg tctctccagc tcattagatt atccagactt ttatggagat ccactagaaa acaggtctct tgaataacatt gtcagccgc ctggagaaat tgatgatagg ttagatcctt cctctttcca acaaatgat cctccttga cagtcctcac tgtcttccaa cctcaaacat tcaaaagacc ttctgcagat tcaactccca ggggttctgc taggttaaca agtcaaaatc tgaattctaa tgaatttaaa cctgctgatg tggctcacc taaaatcccc agtgggtttc ctattgaaga tcacgaaacc agcccatgg ataacttga tgcctttctc tctactcatt taaagctgtt ccctagcgtt tctagcaatt ccttctacga gtctgagcta ccacaaggtt tccaggatta ttacaattta ggccaattca cagatgacga tcaagtcca acacccctcg tggcaataac gatcactagg ctagtgggtg gtttctgtct gccctctgtt atcatgatag cctgtttacag cttcattgtc ttccgaatgc aaaggggccg cttcgccaaag tctcagagca aaacctttcg agtggccgtg gtgggtgtgg ctgtcttctt tgtctgctgg actccatacc acatttttgg agtccctgca ttgcttactg acccagaaac tcccttgggg aaaactctga tgcctctggga tcatgtatgc</p>	Homo sapiens

[illegible]

116/448

80 Complement NP_001727.1 758 Component 5a
 Component 1 Receptor 1

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 yfppkvlcgv dyshdkrrer avaiivrlvg flwplltlti cytfillrtw srratrstkt
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81 Calcitonin NM_005795 767 Receptor-
 like Receptor

gcacgagga acaacctctc tctctscagc agagagtgc acctcctgct ttaggacctat a
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 tatattacaa tgacaattgc tggatcagtt ctgataccca tctcctctac attatccatg

Homo
 sapiens

Homo
 sapiens

82	Calcitonin Receptor- like Receptor	NP_005786.1	767	gcccgaatttg tgctgcttta ctggtgaatc tttttttctt gttaaatatt gtacgcgttc tcatcaccaa gttaaaagt acacaccaag cggaatccaa tctgtacatg aaagctgtga gagctactct tatcttggtg ccattgaatt tgtgctgatt ccatggcgac ctgaaggaaa gattgcagag gaggtatatg actacatcat atgcacttcc agggctcttt ggtctctacc attttctgct tctttaattg agaggttcaa gcaatttctga gaagaaactg gaatcaatc aaaaatccaat ttggaaaacag cttttccaac tcagaagctc ttcgtagtgc gtcttacaca gtgtcaaca tcatgatgat tgaatattgt ctcttaaac gtcctagtga acacttaaat ggaataagca tccatgatat cactgttttg tgccttctct cagaaaaatt atataattga aaatagaagg atggtgtgct tccaatttta aatgactttg aaactcaagg cttggaccga tgaactctga gccagaagac ttcaatatta agagtgtaac gggaatgtca taaagaagag ccttcacatg aatattagtag tgtgttgata taaatactcc atccagctct atgtgggaaa aaagaaatcc tggtttgtaa tgtgtgtcag taaatactcc cactatgcct gatgtgacgc tactaacctg acatcaccaa gtgtggaatt ggagaaaagc acaatcaact ttctgagct ggtgtaagcc agttccagca caccattgat gaattcaaac aaatggctgt aaaactaac atacatgttg gcatgatctc tacccttatt cscaccaaga gacctagcta aggtctataa acatgaagg tgaactttt tttttccca ggtgccgta gtcctttttg tccatcttg atgtgggcag ttgactttt tttttccca ggtgccgta gtcctttttg taactacct ctcaaatgga caataccaga agtgaattat cccgtctggc tttctttct ctatgaaaag caactgagta caattgttat gatctactca ttgtgtgaca catcagttat atctgtggc ataccattg tggaaactgg atgaacagga tgtataatat gcaatcttac ttctatatca ttaggaaaac atcttagtg atgtacaaa acacttctc aacctcttcc tgtcttacca aacagtggga ggaattctt agctgtaaat ataaatttg ccttccatt tctactgtat aaacaaatta gcaatcatt tatataaaga aatcaatga aggatttctt atcttcttg aattttgtaa aaagaaattg tgaataatga gcttgtaaat actccattat tttattttat agtctcaat caatacata caacttatgt aatttttaa gcaaatatat aatgcaacaa tgtgtgtatg ttaatatctg atactgtatc tgggctgatt ttttaataa aatagagtct ggaatgct	IMTAQYECYQ KIMQDPIQQA P	Homo sapiens
83	Cannabinoid Receptor 1	NM_001840	832	MEKKCTLYFL VLLPFFMILV TAELEESPED SIQLGVTRNK YFQDFDPSEK VTKICDQDGN WFRHPASNRT EGVYCNRTWD GWLCWNDVAA GTESMQLCPD LFYLTIIHG LSIASLLISL GIFFYFKSL SQRITLHKNL WTNYTQCNVN THEKVKTLN NQALVTANP VCKVSOFIHL YLMGCNYFWM LCEGIYHLTL FFSFVCNSV TIIHLTAVAN QALVATNPV GFPLIPACIH AIARSLYND NCWISSDTHL LYIIHGPICA IVVAVFAEKQ HLMWYFLGW GFPLIPACIH AIARSLYND NCWISSDTHL LYIIHGPICA ALLVNLFFLL NIVRVLITKL KVTHQAESNL YMKAVRATLI LVPLLGIEFV LIPWRPEGKI ABEVDYIMH ILMHFQGLLV STIFCFNGE VQAILRRNWN QYKIQFGNSF SNSEALRSAS YTVSTISDGP GYSHDCPSEH LNKSIHDIE NVLLKPENLY N ggggactacg gagagctctg caggagccg agggccccc cggggcccaag ggagcttctg A tcccaggagc caggggatgc gaaggattg cccctgtgg gtcactttct cagtcatttt gagctcagcc taatcaaaaga ctgaggttat gaagtcgac ctagatggcc ttgcagatac cacttccgc accatcacca ctgacctct ctagctggc tcaaatgaca ttcagtagca agacatcaa ggtgacatgg catccaatt aggttacttc ccacagaaat tccctttaac ttcctttagg ggaagtccct tccaagagaa gatgactgcy ggagacaacc cccagctagt	cggggcccag ggagcttctg A gtcactttct cagtcatttt ctagatggcc ttgcagatac tcaaatgaca ttcagtagca ccacagaaat tccctttaac ggagacaacc cccagctagt	Homo sapiens

84	Cannabinoid Receptor 1	NP_001831.1	<p> ccagcagac caggtgaaca ttacagaatt ttacacaag tctctctcgt ccttcaagga gaatgagag aacatccagt gtggggagaa cttcatggac atagagtgtt tcatgtctct gaacccagc cagcagctgg ccattgcagt cctgtccctc acgctgggca ccttcacggt cctggagaac ctccctggtg cctgtggtgc cctccactcc cgcagcctcc gctgcaggcc ttcctaccac ttcatcgga cctgtggcgt ggacagctcc ctggggagtg tcatctttgt ctacagcttc atgacttcc acgtgttcca ccgcaagat agccgcaacg tgtttctgtt caaatgggt ggggtcaagg cctcttccac tgcctccgtg ggcagcctgt tctcacagc catcgacagg tacatatcca ttacacagcc cctggcctat aagaggattg tcaccaggcc caaggccgtg gtggcggttt gcctgatgtg gaccatagcc attgtgatcg ccgtgctgcc tctcctggc tggaaactgc agaaactgca atctgttgc tcagacattt tccacacat tgatgaacc tacctgatgt tctggatcg ggtaccagc gctactgttc tgttcatcgt gtatgcgtac atgtatatc tctggaagg tccagccac gccgtccgca tgattcagcg tggcaccag aagagcatca tcatccacac gtctgagat gggaaggtac agtgacccg gccagaccac gccgcgatg acattaggt agccaagacc ctggtcctga tctgtgtgtg gttgatcac tctgtgggccc cctgtctgc aatcatgtg tatgatgtct ttgggaagat gaacaagctc ataaagacgg tgtttgcatt ctgcagtatg cctgtcctgc tgaactccac cgtgaacccc atcatctatg cctgaggag taaggacctg cgacacgctt tccggagcat gtttccctct tgtgaaggca ctgcgcagcc tctggataac agcatggggg actcggactg cctgcacaaa cagcaaaaca atgcagccag tgttcacagg gccgcagaaa gctgcatcaa gagcacggtc aagattgcca aggtaacctat gtctgtgtcc acagacacgt ctgccgaggc tctgtgagcc tgatgcctcc ctggcagcac aggaagaaagaa ttttttttt taagctcaaa atctagaaga gtctattgtc tcttgggta tattttttta actttaccat gctcaatgaa aagtgattg ccacatgtca cttattgtct tagtttccgt ttgggctaact ctcccggggt tcgtaggaaa ccttt </p>	Homo sapiens
85	Cannabinoid Receptor 2	NM_001841	<p> WTIAIVIAVL FLGWNCEKL QSVCSDFPH IDETYLMFWI GVTSVLLLF VYAYMYILWK AHSHAVRMQ RGTQKSIH TSEDGKVQVT RPDQARM DIR LAKTLVLILV VLIICWGPLL AIMVYDVFGK MNKLIKTVFA FCSMLCLLNS TVNPIIALR SKDLRHAFRS MFPSCGTAQ PLDNSMGDSD CLHKHANNA SVHRAAESCI KSTVKIAKVT MSVSTDTSAE AL caggtccctg gagaggacag aaacaaactg gactcctcag cccccggcag ctcccagtg A ccagccaccc acaacacac ccaaaagcctt ctagacaaag ccaaggggag ctgaagggcc caccctatgg aggaatgctg ggtgacagag atagccaatg gctccaaagg tggcttggtg tccaaacctg tgaaggatta catgatcctg agtggctccc agaagacagc tgtgtctgtg ttgtgcaact ttctgggccc gctaaagtgc ctggagaagc tggctgtgct ctatctgac ctgtcctccc accaactccg ccggaagccc tcatacctgt tcaattggcag cttggctggg gctgacttcc tggccagtg ggtctttgca tgcagctttg tgaatttcca tgttttccat ggtgtggatt ccaaggctgt ctctctgctg aagattggca gcgtgactat gaccttcaca gcctctgtg gtagcctct gctgaccgcc atgaccgat acctctgct gcgctatcca </p>	Homo sapiens

86	Cannabinoid Receptor 2	NP_001832.1	MEECWVTEIA NGSKDGLDGN PMKQDYMILSG PQKTAVALVC TLLGLLSALE NVAVLVILIS P	Homo sapiens
87	Leukocyte Antigen CD97	NM_001784	SHQLRRKPSY LFIGSLAGAD FLASVVFAC FVNHFVHGV DSKAVFLLKI GSVTMTFTAS VGSLLLTALD RYICLRPPS YKALLTRGRA LVTLGIMVVL SALVSYPPLM GWTCCPRPCS ELFLIPNDY LLSWLLFIAF LFSGLIITYG HVLWKAHQHV ASLSGHQDRQ VPGMARMLRD VRLAKTLGLV LAVLLICWFP VLALMAHSLA TTLSDQVKKK FAFCSMLCLI NSMVNPVIYA LRSGEIRSSA HHCLAHWKKC VRGLGSEAKE EAPRSSVTET EADGKITPWP DSRDLDSLDC agcctgtgga gacgggacag cctgttccca ctcactcttt cccctgccgc tctgccggc A agctccaacc atgggagggc gcgtctttct cgcattctgt gtctggctga cctgccggg agctgaaacc caggactcca ggggctgtgc ccgtgtgtgc cctcagaact cctcgtgtgt caatgccacc gcctgtcgt ccaatccagg gtccagctct ttttctgaga tcatcaccac cccgacggag acttgtgacg acatcaaca gtgtgcaaca ccgtcgaaa gtctatgcgg aaaaattctcg gactgtgga acacagaggg gagctacgac tgcgtgtgca gcccgggata tgagcctgtt tctggggcaa aaacattcaa gaatgagagc gagaacacct gtcaagatgt ggacgagtgc agctccggc agcatcagt tgacagctcc accgtctgt tcaacacct gggttcatac agctccgct gcccccagg ctggaagccc agacacggaa tccccgaataa ccaaaaggac actgtctgtg aagatatgac tttctccacc tggaccccc cccctggagt ccacagccag acgctttccc gattcttga caaagtccag gacctggga gagactcaa gacaagtca gccgaggtca ccatccagaa tgggtggatg aactgatgga agctcctgga gacgtagag cctggcgc accgttccg cactcatag ccacccagct gctctcaac ctggaagata tcataggat cctggccaag agcctgccta aagggccctt	Homo sapiens

cactacatt tccctctoga acacagagct gacctgatg atccaggagc ggggggacaa
 gaacgtcact atgggtcaga gaagcgacg catgaagctg aattgggctg tggcagctgg
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 attaaacaca tgcatacaga aaaaaaaaaa a
 MGRVFLAFC VMLTLPGET QDSRGARWC PQNSSCVNAT ACRNPGFSS FSEIITPTE P
 TCDDINECAT PSKVSCKGFS DCWNTGSDY CVCSPGYEPV SGATFKNES ENTQDVDEC
 SSGHQCDSS TVCFNTVGSY SCRCRPGWKP RHGIPNNQKD TVCEDMTFST WTPPGVHSQ
 TLSRFFDKVQ DLGRDSKTSS AEVTIQNVIK LVDELMEAPG DVEALAPPVR HLIATQLLSN
 LEDIMRILAK SLPKGPFTYI SPSNTELTLM IQERGDKNVT MGSSARMKL NWAVAAGAE
 PGPAVAGILS IQNMTTLLAN ASLNLSKKQ AELEIYESS IRGVQLRRLS AVNSIFLSHN

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89	941	EMR1 Hormone NM_001974 Receptor	NTKELNSPIL FAFSHLESSD GEAGRDPPAK DVMPGPRQEL LCAFWKSDSD RGGHWATEVC QVLGSKNGST TCQCSHLSSF TILMAHYDVE DWKLTILTRV GLALSFLCLL LCILTFLLVR PIQGSRTTIH LHLICICLFVG STIFLAGIEN EGGQVGLRCR LVAGLLHYCF LA AFCWMSLE GLELYFLVVR VFQOGLSTR WLCLIGYGVV LLIVGVSAAL YSKGYGRPRY CWLDFEQGFL WSFLGPVTFI ILCNAVIFVT TWKLTQKFS EINDPMKKLK KARALITAI AQLFLLGCTW VFGLFIFDDR SILVTYVFTI LNCLOGAFLY LLHCLLNKKV REEYRKWACL VAGGSKYSEF TSTTSGTGN QTRALRASES GI ctaaagtttt tttcttgaa tgacagaact acagcataat gcgtggcttc aacctgtcc A tctctgggg atgttgtgtt atgcacagct gggaaggga cataagacc acacggaaac caaacacaaa gggtataaac tgtagagaca gtacctgtg ccagcttat gccacctgca ccaatacgtt ggacagttac tattgcactt gcaaacagg ctctctgtcc agcaatgggc aaaatcactt caaggatcca ggagtgcgat gcaaatat tgatgaatgt tctcaagcc ccagccccg tggctcctaac tcatcctgca aaacctgtc agggagggtac aagtgcagct gttagatgg tttctcttct cccactggaa atgactgggt ccagggaaa cgggcaatt tctcctgtac tgatatcaat gactgcctca ccagcagggt ctgcccgtgag cattctgact gtgtcaact catgggaagc tacagttgca gctgtcaagt tggattcatc tctagaaact ccacctgtga agacgtgaat gaatgtgcag atccaagagc ttgcccagag catgcaactt gtaataacac tgttggaac tactctgtt tctgcaacc aggatgtgaa tccagcagtg gccacttgag ttgccagggt ctcaaagcat cgtgtgaga tattgatgaa tgcactgaaa tgtgccccat caattcaaca tgcaccaaca ctctgggag ctactttgc acctgccacc ctggcttgc accaagcagt ggacagttga atttcacaga ccaaggagtg gaatgtagag atattgatga gtgccgcaa gatccatcaa cctgtgttc taattctatc tgcaccaatg ccctgggctc ctacagctgt ggctgcatg taggctttca tcccaatcca gaaggctccc agaaagatgg caacttcagc tgccaaagg ttctctcaa atgtaaggaa gatgtgatac ccgataataa gcagatccag caatgccaa agggaacccg agtgaaccc ctatgtctt ccttttgtc acaataaat aacatcttca gcgttctgga caaagtgtgt gaaaataaaa cgaccgtagt ttctctgaag aatacaactg agagctttgt cctgtgtctt aaacaaatat ccatgtggac taaattcacc aaggaagaga cgtcctcctt gccacagtc ttcctggaga gtgtggaaag catgacactg gcatctttt ggaaacccct agcaaatgtc actccggctg ttcggggcga atacttagac attgagagca aagttatcaa caaagaatgc agtgaagaga atgtgacgtt ggacttgga gccaaagggg ataagatgaa gatcgggtgt tccacaattg aggaatctga atccacagag accactgggt tggcttttgt ctcttttgtt ggcattggaat cggttttaaa tgagcgcttc ttccaagacc accaggtctc cttgaccacc tctgagatca agctgaagat gaattctcga gtctgtggg gcataatgac tggagagaag aaagacggct tctcagatcc aatcatctac actctggaga agcttcagcc aaagcagaag tttagaggc ccactgtgtt ttccctggag actgatgga aggttggaag atggacatcc tttagctgtg tgatccctga agcttctgag acatatacca tctgcagctg taatcagatg gcaaatctt ccgttatcat ggcgtctggg gagctcacga tggacttttc cttgtacatc attagccatg taggcattat catctccttg gtgtgcctcg tcttgccat cgtccacttt ctgctgtgc gtccatccg aaatcacaa acctacctcc acctgacct ctgctgtgt ctcctcttg cgaagactct ctctctgccc ggtatacaca agactgacaa caagacgggc tgcgccatca	Homo sapiens
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90	941	EMR1 Hormone NP_001965.1 Receptor	<p> tgcgggctt cctgcactac cttttccttg cctgcttctt ctggatgctg gtggaggctg tgatactgtt cttgatggtc agaaacctga aggtggtgaa ttacttcagc tctcgcaaca tcaagatgct gcacatctgt gcctttggtt atgggctgcc gatgctggtg gtggtgatct ctgccagtgt gcagccacag ggcctatggaa tgcataatcg ctgctggctg aatacagaga caggttcat ctggagtctt ttggggccag ttggacagct tatagtgatc aactcccttc tcctgacctg gacctgtggt atcctgagcg agaggttttc cagtgttaat gccgaagtct caacgtaaa agacaccagg ttactgacct tcaaggcctt tgcctcagctc ttcatcctgg gctgctctg ggtgctgggc attttcaga ttggacctgt ggcaggtgtc atggcttacc tgttaccat catcaacagc ctgcaggggg ccttcactct cctcatccac tgtctgtcca acggccaggt acgagaagaa tacaagaggt ggcactctgg gaagacgaag cccagctccc agtcacagac ctcaaggatc ttgctgtcct ccatgccatc cgcttccaag acgggttaaa gcctttctg cttcaaaata tgctatggag ccacagttga ggacagtagt ttcctgcagg agcctacctt gaaatctctt ctacgtttaa catggaaatg aggatccac cagccccaga acctctggg gaagaatgtt gggggccgtc ttctgtggtt tgtatgcat gatgagaaat cagacgttct tgctccaaac gaccatttta tcttctggtc tgcaacttc ttcaattcca gagttctga gaacagacc aaattcaatg gcatgaccaa gaacacctgg ctaccatttt gtttctctt gccctgtgtg gtgcatggtt ctaagcgtgc cctccagcg cctatcatatc gcctgacaca gagaacctct caataaatga ttgtcgcct gtctgactga ttaccctaa aaaaaaaaa aaaaaaaaaa aaaaaaaaaa MRGNLILFW GCCVMHSWEG HIRTRKPNT KGNCRDSTL CPAYATCTNT VDSYYCTCKQ P GFLSSNGQNH FKDPGVRCRD IDECSQSPQ CGPNSSCKNL SGRYKSCLD GFSSPTGNDW VPGKPGNFSC TDINECLTSR VCPESHSDCN SMGSYSCSQ VGFISRNSTC EDVNECADPR ACPEHATCNN TVGNSYSCFN PGFESSGHL SCQGLKASCE DIDECTEMCP INSTCTNTPG SYFCTCHPGF APSSGQLNFT DQVECRDID ECRQDPSTCG PNSICTNALG SYSCGCIYGF HPNPEGSKD GNFSQQRVLE KCKEDVIPDN KQIQCCQEGT AVKPAVVSFC AQINNIFSVL DKVCENKTTV VSLKNTTESF VPLKQISMW TKFTKEETSS LATVFLESVE SMTLASFWKP SANVTPAVRA EYLDIESKVI NKECSEENV LDLVAKGDKM KIGCSTIEES ESTETTGVAF VSFVGMESVL NERFFQDHQA PLTTSEIKLK MNSRVVGGIM TGEKKDGFSD PIITYLENVQ PKQKFERPIC VSWSTDVKGG RWTSFGCVIL EASETYTICS CNQMANLAVI MASGELTMDF SLYIIISHVGI IISLVCLVLA IATFLLCRSI RNHNTYLHLH LCVCLLLAKT IFLAGIHKTD NKTGCAIIAG FLHYLFLACF FWMLEAVIL FLWVRNLKVV NYFSSRNIMK LHICAFGYGL PMLVVVISAS VQPQGYGMHN RCWLNTETGF IWSFLGPVCT VVINSLLLT WTLWILRQRL SSVNAEVSTL KDTRLITFKA FAQLFILGCS WVLGIFQIGP VAGVMAYLFT IINSLQGAFI FLIHCLLNGQ VREYKRWIT GKTKPSSQSQ TSLRILLSMP SASKTC ggaacacgac acctagaagt aggatgaga ttccctgaag ttccctctg aggaagacc A acctctcgc ctggagagcc ggggctggcg gtgcctgagg acctctcgg cctggacagc ccacgcgggc ttggggggcc tcgctctgcc ctcatggggc ggcctatcggg tccggaagcg gcgagtgaat attcaaatgg ccagtagggg gcgcactcgg aagtggccgc cccgcatgag gcagttcagc ggcctccgaga gtccggggag ggaggtttat tctccgctg cagcagactg tgaatccgc aacctagagc aggagagcg gccctgggtg ggaagagggc accaacatct ggacggcagg taccagaga gtgagcagct ccacgcggga ctgtgcacgg tggccgacac </p>	Homo sapiens
91	965	G Protein-Coupled Receptor GPR30	<p> ggaacacgac acctagaagt aggatgaga ttccctgaag ttccctctg aggaagacc A acctctcgc ctggagagcc ggggctggcg gtgcctgagg acctctcgg cctggacagc ccacgcgggc ttggggggcc tcgctctgcc ctcatggggc ggcctatcggg tccggaagcg gcgagtgaat attcaaatgg ccagtagggg gcgcactcgg aagtggccgc cccgcatgag gcagttcagc ggcctccgaga gtccggggag ggaggtttat tctccgctg cagcagactg tgaatccgc aacctagagc aggagagcg gccctgggtg ggaagagggc accaacatct ggacggcagg taccagaga gtgagcagct ccacgcggga ctgtgcacgg tggccgacac </p>	Homo sapiens

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tgtccgggag gtgcagtggc tcgaggtcac gctgggttc atcgtgccct tgcacatcat
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ggcgcctccc tgcagcagat ctttccgcca tgcaccccc ctcacggcc acattgtcaa
cctgcgcgc tctccaaaca gctgcctaaa cccctcctc tacagcttct tcggggagac
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gttcagcagt gccgtgtaga cagccttggc cgcataggcc cagccagggt gtgactcggg
agctgcacac acctgggtgg acacaaaggca cggccacgtc atgtctctaa actgcggtca
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cggcccgag cagcaggaag gccctctgtt ggagcgcctc cgtctgtctc cgggtggtt
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gctgccgtgt gggttagtct ggtgccagga caatgaaata ctccagcacg tgtggctgac
gaatttggt ctacagaaat aacagctggg gacaactgcg gtgatgatgt aaaaacctc
ccataaaatg taagaaaagc tgatgaggct ggtgacgttc agccttctg aataaacctg
tcattgtcgg atcctt

Homo

P

EHQQYVIGLF

ALANGTGELS

INLSHPLLGT

PAAPTTSPE

GLEMYPGTAQ

MDVTSQARGV

NP_001496.1

G Protein-

965

92

Coupled Receptor GPR30	93	Cholecystoki nin A Receptor	978	978	sapiens
<p>LSCLYTIPLF PIGFVGNILI LVVNISFREK MTIPDLYFIN LAVADLILVA DSLIEVFNLH ERYDIAVLIC TFMSLFLOVN MYSSVFELTW MSFDRIYIALA RAMRCSLFRT KKHARLSGGL IWMASVSATL VPFTAVHLQH TDEACFCFAD VREVQWLEVT LGFIVPFALI GLCYSLIVRV LVRAHRHRL RPRRQKALRM ILAVLVVFFV CWLPENVFIS VHLLQRTQPG AAPCKQSFH AHPLTGHIVN LAAFSNSCLN PLIYSFLGET FRDKLRLYIE QKTNLPALNR FCHAALKAVI PDSTEQSDVR FSSAV ggaatggctg aaaaagccca cactggaaa tcactccctc cctgctcctc caggcaggt A tgcattctcg agacgtctcg gtcattagag gaatgagccg ggagtggagc attcaccagc tctccagcac ttggtggaaa gcagcaggca aggatggatg tgggtgacag ccttcttgtg aatggaagca acatcactcc tccctgtgaa ctggggctcg aaaaatgagac gcttttctgc ttggatcagc cccgtccctc caaagagtgg cagcagcgg tgcagattct cttgtactcc ttgatattcc tgcacagcgt gctgggaaac acgctggta tccacctgct gattcggaac aagcggatgc ggacgggtcac caacattctc atcccaatc tggctgtcag cgacctcag ctctgtctct tctgcatgcc gttcaacctc caccacctac ttcattggca cctctgtgag tgtatctacc gggagcgccg ttgcaagac caccacctac tctagagaga tatgggtgca ttgcaaac cttacagtc tttaatctgg tagccatctc ccatgcttg aaggtgattg ctgtacctg gtgcttctc ttaccatca tgactccgta cccatttat agcaacttgg tgcctttac caaaaataac aaccagaccg cgaatattg ccgctttcta ctgcaaatg atgttatgca gcagtcctgg cacacattcc tgttactcat cctcttctt attcctggaa ttgtgatgat ggtggcatat ggattaatct ctttggaaat ctaccaggga ataaaattg aggttagcca gaagaagtct gtaaaagaaa ggaacacctag caccaccagc agcgcaaat atgaggacag cgatgggtgt tacctgcaaa agaccaggcc cccgaggaag ctggagctcc ggcagctgc caccggcagc agcagcagg ccaaccgcat cgggagtaac agctccgac ccaactgat ggccaagaaa aggtgatcc gcattgtcat cgtcatctg ggcctacgac accgctccc cagagcgccg cctctcagga ttcagcgcca acgctggcg ggcctacgac accgctccc cagagcgccg cctctcagga acccccattt ccttcatctt cctcctgtcc tacacctctt cctgctcaa cccatcatc tactgcttca tgaacaaaag cttccgctc ggcttcatgg ccacctccc ctgctgcccc aatcctggtc cccaggggc gaggggagag gtgggggag aggaggagg cgggaccaca ggagcctctc tgtccaggtt ctcgtacagc catatagtg cctcgtgct acccagtg gatgtccctt gacctccac cgcagaagga aggcaggag gaggcagaga agaaagaacg gaagaagaga tcaggaagag aaggagcaga gcagagctga tggagaagga aggtccatc tccagtggga actcttcaag gtctctttc atccttcatc tgattccaga gcactgctc agtggggcca tgattggtt ctaggcagtt caaagcagga tatgttaagt aacactcaac catcag</p>					
Cholecystoki nin A Receptor	94	Cholecystoki nin A Receptor	978	978	Homo sapiens
<p>MDVDSLVN GSNITPPCEL GLENETFLCL DQPRPSKEWQ PAVQILLYSL IFLLSVLGN P LVITVLIRNK RMRTVNIFL LSLAVSDML CLFCMPFNI PNLKDFIFG SAVCKTTTF MGTSVSVSTF NLVAISLERY GAICKPLQSR WQCTKSHALK VIAATWCLSF TIMTPYPIYS NLVPFTKNNN QTANMCRFL PNDVMQSWH TFLLLILFLI PGIVMMVAYG LISLELYQGI KFEASQKSA KERKPTTSS GKYEDSDGCV LQKTRPPRKL ELRQLSTGSS SRANRIRNS SAANLMAKR VIRMLIVIV LFFLCWMPIF SANAWRAYDT ASERRLSGT PISFILLLSY</p>					

95

1103

Corticotropin releasing
factor
Receptor 2

TSSCVNPIIY CFMNRFRRLG FMATFPCCPN PGPPGARGEV GEEEGGTTG A\$LSRFSYSH
MSASVPPQ

atggacgcgg cactgctcca cagcctgctg gaggccaact gcagcctggc gctggctgaa A
gagctgctct tggacggctg ggggccacc ctaggccccc agggctcccta ctccactgc
aacacgacct tggaccagat cggaaactgc tggccccga gcgctgccc agccctcgtg
gagagccgt gccccgagta cttcaacggc gtcaagtaca acacgaccg gaatgcctat
cgagaatgct tggagaatgg gacgtgggccc tcaaatgaca actactaca gtgtgagccc
attttggatg acaagcagag gaagtatgac ctgcaactacc gcatcgccct tgtcgtcaac
tacctgggccc actgcgtatc tgtggcagcc ctggtggccc ccttctgct tttctggccc
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ctgcgaaatg tcatgtggtt cctgctgag ctcgttgacc atgaagtga cgagagcaat
gaggtctggt gccactgcat caccaccatc ttcaactact tctgtgtgac caacttctc
tggatgtttg tggaaaggctg ctacctgac agggccattg tcatgacctc ctccactgag
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gcctgggcca tgggcaagct ctactatgag aatgaacagt gctggttttg caaggagcct
ggcgacctgg tggactacat ctaccaaggc cccatcattc tctgtctctc gatcaatttc
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gagacaatcc agtacaggaa ggcagtgaag gccacctgg tgcctctgccc cctcctgggc
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cactcccttc gactcccat ggcggggccc atgtccatcc ctacatccc caccggatc
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acacacacag ctatttatag tagcacac agggctcccc tgcctactc atggagccag
cagccaggca atggtgtggc cctgcactgg ccttggact ccacactcag tgggtgcccctg
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acctagagag gctcactgt accccacctt gttcctgtgt cccctcccca gccatcctcc
cggccttggg ggtccatga aggatgcagg ctctcaggcc tggcttctc tcttgggaga
ccccctctct gcctagtcca cagattaggc aatcaaggaa gacgccatca gggaaagccac
atccttagtc aaccagttgc atcgtgcggg gcaaaatgag gagcagaggc atggagaggg
gagcgctggg atgggaatag cagaaccacc atgtcttcag tgattgaaac tcatacccca
ttgccccttg cctccagtc tccccttcag aaacatctct gctctctgtg aaataaacca
tgccctcttg

A

Homo
sapiens

96

1103

Corticotropin releasing
factor

MDAALLHSLI EANCSLALAE ELLLDGWGPP LDPEGPYSYC NTLDQIGTC WPRSAAGALV P
ERPCEYFNG VKYNTTNAY RECLENGTWA SKINYSQCEP ILDDKQRKYD LHYRIALVNV
YLGHCVSVAA LVAAFLFLA LRSIRCLRV IHNLIITFI LRNVWFWLLQ LVDHEVHESN

Homo
sapiens

Receptor 2

NM_000794

Dopamine
Receptor D1

1240

97

Homo
sapiens

EVWCHCITTI FNYFVVNTFF WMFVEGCVLH TAIVMTYSTE RLRKCLFLFI GWCIPFFPIIV
 AWAIGKLYE NEQCWFGKEP GDLDVYIYQG PIILVLLINF VLFENIVRIL MTKLRASSTTS
 ETIQYRKAVK ATLVLLPLL G ITYMLFFVNP GEDDLSQIMF IYFNSFLQSF QGFFVSVFYC
 FFNGEVRSAV RKRWRWQDH HSLRVPMPARA MSIFTSPTRI SFHSIKQTAA V
 ggctcgctgc ctgcgattgc cacagctcc tgagaggtcg cggcgagtcg ctgcggggag A
 gcgcgggggc ctgctctgtg gggctgaag cgcgcgagc ttcgccaaagg ctctgggctc
 tcgaaaggaa gccaaagaaa gaagctgccc aggtgaccag tctgggaggt gctctctccc
 aaggaagctc cgagcgccca ggagccctta gccgggggtct agtgcctttt gaacaatctc
 cagctcttca aggaagtggg ctgcgcgcgc ctctcttggg acctggcctg ggatcccttc
 cccaaacgca cccggcgcat ttttgcgac cgggagccga accctgctg cgcgcagctg
 gctgggctca ggcgcgcttc ctcaacgttt cggagccgct gccccagcg aagtcacat
 tccaagctcc aggggctttg agagagacga cccaaaggca agcgcttttg agagctgctg
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 agagcagagg ccagagagtc actggattga tgatttagaa tatgctaaa agccagtgtc
 ttattgggg aattcagggg ctttctggtg ccaagacacg tgacctgcag atgaggactc
 tgaacacctc tggcatggac gggactgggc tgggtggtgga gagggacttc tctgtcgtg
 tctcactgc ctgttttcta tgcgtgctca tctgttccac gctcctgggg aacacgttgg
 tctgtgctgc cgttatcagg ttcgcacacc tgggttccaa ggtgaccaac tctttgtca
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 tggactatga cactgacgtc tctctggaga agatccaacc catcacaca aacgggtcagc
 acccaacctg aactcgaga tgaatcctgc cacacatgct catcccaaa gctagaggag
 attgctctgg ggtttgctat taagaaacta aggtacgggtg agactctgag gtgtcaggag
 agccctctgc tgcctttccaa cacacaatta actcgttttc caaatatatt ccagtgtatt

98	1240	Dopamine Receptor D1	NP_000785.1	<p> tctgtgttg ttcatagtca atcaaacagg gacactacaa acatggggag ccataaggga catgtctttg gcttcagaat tgtttttaga aatttttct tatcttagga ttaccacaaat aggcaaaaga atcaacagtg aacagcttca cttaaaaatca aatttttctg ggaagaaaaat gagatgggtt gagtttgtg tacaacaa ggtgctaaca ctgttcccag caaagttttc agattgtaaa ggtaggtgca tgccttcata aatttttct aaaaatttaa ttgaggctta cagtaggagt gagaaatttt ttccagaat tgagagatgt ttgttgata ttggttctat ttatttatg tatatatga tatttttaat ttatgatata ataaatatat atttatcata ttaaatagga taaattaatg agtttatcc aagaccttac aaccacattt ctggccattt aactagcact ttataagcca atgaagcaaa cacacagact ctgtgagatt ctaaatgttc atgtgtaact tctaga </p>	Homo sapiens
				<p> SVRLTACFL SLLILSTLLG NTLVCAAVIR FRHLRSKVTN P FFVISLAVSD LLVAVLVPW KAVAEIAGFW PFGSFCNIWV AFDIMCSTAS ILNLCVISVD RYWAISSPER YERKMTPKAA FILISVAWTL SVLISFIPVQ LSWHKAKPTS PSDGNATSLA ETIDNCSSSL SRYAIISSV ISFYIPVAIM IVTYTRIYRI AQQIRIRIAA LERAAVHAKN CQTTTNGKPK VECSPRESSF KMSFKRETKV LKTLVIMGV FVCCWLFFFI LNCILPFCGS GETQPCIDS NTFDFVWFVG WANSSLNPII YAFNADFRKA FSTLLGCYRL CPATNNAIET VSINNGAAM FSSHHEPRGS ISKECNLVYL IPHAVGSSED LKKEEAAGIA RPLEKLSPAL SVILDYDIDV SLEKIQIPITQ NGQHPT </p>	
99	1241	Dopamine Receptor D5	NM_000798	<p> ggcacgagggc agggctgaag ttgggacgc gcaacagaccg cccctgcagt ccagcccga A atgtgcgcg caggcagcaa cggcacgcg taccggggc agttcgctct ataccagcag gtggcaccg ggaacgcctt ggggggctcg gggggggcac cggcactggg gccctcacag gtgtgcaccg cctgcctgct gacctactc atcatctgga ccatgtgtgg caactgtgtg gtgtgcgcag ccactgtgct gagccgccac ctgtgcgcca ccatgaccaa cgtcttcac gtgtctctgg ccgtgtcaga cttttctgtg gcgtgctgg tcatgcccc gaaggcagtc gccgaggtgg ccggttactg gccctttgga gcgttctgg acgtctgggt ggccttcgac atcatgtgt ccactgcctc cactcctgaac ctgtgcgtca tcagcgtgga ccgctactgg gccatctcca ggccttccg catggacctt gtccatcctc atctccttca tccgggtcca gctcaactgg gtcggcctgg catggacctt ttggggcggg ctggacctgc caaacaacct ggccaactgg cacagggacc aggcggcctc ttggggagccc gagtgaaatg cagagaaatg tgactccagc acgcccgtgg aggaggaact ttgttcctcg ctcttcctcg ctcatcagct cgttgccatc ctgaatcgaa cctacgccaat ctcttcctcg ctcatcagct tctacatccc cgttgccatc atgacgtga cctacacgag catctaccg atgccccagg tgcagatccg cagatattcc tccctggaga gggccgcaga gcacgcgag agctgccgga gcagcgcagc ctgcgcgccc gacacagcc tgcgcgttc catcaagaag gagaccaagg ttctcaagac cctgtcggtg atcatggggg tcttcgtgtg ttgctgggtg ccttcttca tcttaactg catgtgccc ttctgcagtg gacacctga aggcctccg gccggcttc cctgcgtcag tgagaccacc ttcgacgtct tcgtctggtt cggctgggt aactcctcac tcaaccccc catctatgcc ttcaacgccc actttcagaa ggtgtttgccc cagctgctgg ggtgcagcca cttctgtccc cgcacgcccg tggagacggt gaacatcagc aatgagctga tctctacaa ccaagacatc gtcttcaca aggaatcgc agctgcctac atccacatga tgcacacgc cgttaccccc ggcaaccggg aggtggacaa cgacgaggag gaggtgctctt tcgatcgcat gttccagatc </p>	Homo sapiens

100	1241	Dopamine Receptor D5	NP_000789.1	<p> aaaaaaaaa MLPPGNSGTA YPQPFALYQQ LAQGNVGGG AGAPLGPSSQ VVTACLTLTLL IIWTLGNVL P VCAAIIVRSRH LRANMTNVFI VSLAVSDLFV ALLVMPWKAV AEVAGYWPFG AFCDVWVAFD IMCSTASILN LCVISVDRYW AISRPFRYKR KMTQRMALVM VGLAWTSLIL ISFIPVQLNW HRDQAASWGG LDLPNNLANW TPWEEDFWEP DVNAENCDS LNRTYAISSS LISFYIPVAI MIVTYTRIYR IAQVQIRRIIS SLERAHEHAQ SCRSSAACAP DTSLRASIKK ETKVLKTLVS IMGVFVCCWL PFFILNCMPV FCSGHPEGPP AGFPFCVSETT FDFVFWFGWA NSSLNPVIYA FNADEFQKVEA QLLGCSHFCS RTPVETVNIS NELISYNQDI VFHKEIAAAY IHMMPNAVTP GNREVDNDEE EGPFDRMFQI YQTSPPDGDPV AESVWELDCE GEISLDKITP FTPNGFHH agagcctggc caccagtggt ctcaccggc gaactggagc cgtgatggatc cactgaatct gtccgtggtat A gatgatgac tggagaggca cactgaactga cgtgatggatc acgggtcaga cgggaaggcg gacagaccc actacaacta ctatgccaca ctgtccacc cgtccaccg tgcctcaccg tgcctcaccg ttcggcaacg tctggtgtgt catggtgtgt tcccgcgaga aggcgctgcga gaccaccacc aactacctga tctgcagcct cgcagtggtg tggaaattca gcaggattca cgtgatgacatc tgggtgtgtct acctggaggt ggtaggtgag tggaaattca gcaggattca cgtgatgacatc ttcgtcactc tggacgtcat gatgtgcacg gcagatgccc atgctgtaca atacgcgcta cagctccaaag atcgacaggt acacagctgt ggccatgccc ctcctatcgtc tgggtcctgt ccttcaccat ctcctgccca cgccgggtca ccgtcatgat ctcctatcgtc gcagagaccag aacgagtga tcatggccaa cccggccttc ctcctcttcg gactcaataa ctcctatcgtc ctcctctac gtgcccttca ttgtcaccct gctggtctac gtggtctact ctcctatcgt ctcctatcgtc cgcagacgc cgaagcgag tcaacacca acgcagcagc atcaagatct acattgtcct cgcagacgc gagggctcca ctaaaaggga atgtactca ccccgaggac cgagctttca gggccacccat gagggctcca ctaaaaggga atgtactca ccccgaggac atgaaactct gcaccgttat catgaagtct aatggaggat tcccagtgaa caggcgagga gtggaggctg cccggcgagc ccaggagctg gagatggaga tgcctccag caccagccca cccagagaga cccggtacag ccccatccca cccagccacc accagctgac tctccccgac ccgtcccacc atggtctcca cagcactccc gacagccccg ccaaacaga gaagaatggg catgccaaa accaccccaa gattgccaa atctttgaga tccagaccat gccaatggc aaagcccgga cctccctcaa gaccatgagc cgtagggaagc tctccagca gaaggagaag aaagccactc agatgctgc cattgtctc ggcgtgttca tcatctgctg gctgcccctc ttcatcacac acatcctgaa catacactgt gactgcaaca tcccgcctgt cctgtacagc </p>	Homo sapiens
101	1242	Dopamine Receptor D2	NM_000795	<p> aaaaaaaaa MLPPGNSGTA YPQPFALYQQ LAQGNVGGG AGAPLGPSSQ VVTACLTLTLL IIWTLGNVL P VCAAIIVRSRH LRANMTNVFI VSLAVSDLFV ALLVMPWKAV AEVAGYWPFG AFCDVWVAFD IMCSTASILN LCVISVDRYW AISRPFRYKR KMTQRMALVM VGLAWTSLIL ISFIPVQLNW HRDQAASWGG LDLPNNLANW TPWEEDFWEP DVNAENCDS LNRTYAISSS LISFYIPVAI MIVTYTRIYR IAQVQIRRIIS SLERAHEHAQ SCRSSAACAP DTSLRASIKK ETKVLKTLVS IMGVFVCCWL PFFILNCMPV FCSGHPEGPP AGFPFCVSETT FDFVFWFGWA NSSLNPVIYA FNADEFQKVEA QLLGCSHFCS RTPVETVNIS NELISYNQDI VFHKEIAAAY IHMMPNAVTP GNREVDNDEE EGPFDRMFQI YQTSPPDGDPV AESVWELDCE GEISLDKITP FTPNGFHH agagcctggc caccagtggt ctcaccggc gaactggagc cgtgatggatc cactgaatct gtccgtggtat A gatgatgac tggagaggca cactgaactga cgtgatggatc acgggtcaga cgggaaggcg gacagaccc actacaacta ctatgccaca ctgtccacc cgtccaccg tgcctcaccg tgcctcaccg ttcggcaacg tctggtgtgt catggtgtgt tcccgcgaga aggcgctgcga gaccaccacc aactacctga tctgcagcct cgcagtggtg tggaaattca gcaggattca cgtgatgacatc tgggtgtgtct acctggaggt ggtaggtgag tggaaattca gcaggattca cgtgatgacatc ttcgtcactc tggacgtcat gatgtgcacg gcagatgccc atgctgtaca atacgcgcta cagctccaaag atcgacaggt acacagctgt ggccatgccc ctcctatcgtc tgggtcctgt ccttcaccat ctcctgccca cgccgggtca ccgtcatgat ctcctatcgtc gcagagaccag aacgagtga tcatggccaa cccggccttc ctcctcttcg gactcaataa ctcctatcgtc ctcctctac gtgcccttca ttgtcaccct gctggtctac gtggtctact ctcctatcgt ctcctatcgtc cgcagacgc cgaagcgag tcaacacca acgcagcagc atcaagatct acattgtcct cgcagacgc gagggctcca ctaaaaggga atgtactca ccccgaggac cgagctttca gggccacccat gagggctcca ctaaaaggga atgtactca ccccgaggac atgaaactct gcaccgttat catgaagtct aatggaggat tcccagtgaa caggcgagga gtggaggctg cccggcgagc ccaggagctg gagatggaga tgcctccag caccagccca cccagagaga cccggtacag ccccatccca cccagccacc accagctgac tctccccgac ccgtcccacc atggtctcca cagcactccc gacagccccg ccaaacaga gaagaatggg catgccaaa accaccccaa gattgccaa atctttgaga tccagaccat gccaatggc aaagcccgga cctccctcaa gaccatgagc cgtagggaagc tctccagca gaaggagaag aaagccactc agatgctgc cattgtctc ggcgtgttca tcatctgctg gctgcccctc ttcatcacac acatcctgaa catacactgt gactgcaaca tcccgcctgt cctgtacagc </p>	Homo sapiens

102	1242	Dopamine Receptor D2	NP_000786.1	<p>gccttcacgt ggctgggcta tgtcaacagc gccgtgaacc ccatcatcta caccaccttc aacattgagt tccgaaggc cttcctgaag atcctccact gctgactctg ctgcctgccc gcacagcagc ctgcttccca cctccctgcc caggccggcc agcctcacc ttgcgaaccg tgagcaggaa ggctggggtg gatcgccctc ctctctcttag ccccgccagg cctgcagtg ttcgcttgcc tccatgctcc tcaactgccc caccacctca ctctgccagg gcagtgcctag tgagctggcc atggtaccag cctgggggct ggccccagct caggggcagc tcatagagtc ccccctcca cctccagtc cctatcctt ggaccacaa atgcagccgc cttccttgac cttccctgg ggctctaggg ttgctggagc ctgagtcagg gccagaggc tgagttttct ctttgtggg cttggcgtgg agcaggcgtt ggggagagat ggacagttca caccctgcaa ggccccagg aggcaagcaa gctctctgc cagaggagca ggcaactca gtcctgggag accatgtaa ataccagact gcaggttgga cccagagat tcccaagcca aaaccttag ctccctccg caccctgat tggacctcta cttccaggc tagtccggac caccctcacc ccgttacag tccccaagt gttccacat gctctgagaa gaggagccct catcttgaag ggccccagg ggtctatgg gagagaaact ccttgcccta gccacctg ctgcctctg acggccctgc aatgtatccc ttctcacagc acatgctgc cagcctggg cctggcaggg aggtcaggcc ctggaactct atctggcctt gggctaggga catcagaggt tcttgaggg actgctctg ccacactctg acgcaaaacc acttccctt tctattcctt ctggccttc ctctctctg tttcccttc cttccactgc cctgctcta gaggagccca cggctaagag gctgctgaaa accatctggc ctggcctggc cctgccttga ggaaggagg ggaagctgag cttgggagag cccctgggc ctgactctg taacatcact atccgatgca ccaactaat aaaacttga cgagtccact tc</p>	Homo sapiens
				<p>REKALQTTN YLIVSLAVD PFNGSDGKAD RPHYNYVATL LTLIAIVF GNVLCMAVS P SIINLCAISI DRYTAVAMP LYNTYSSKR RVTMISIVM VLSFTISCPL LFGLNNADQN ECIIANPAFV VYSSIVSFYV PFIVTLLVYI KIYIVLRRRR KRVNTRKSSR AFRAHLRAPL KGNCTHPEDM KLCVTIMKSN GSFPVNRVRV EAARRAQELE MEMLSSTSP ERTRYSPIPP SHQLTLDPD SHHGLHSTPD SPAKPEKNH AKDHPKIAKI FEIQTMPNGK TRTSLKTMSR RKLSQKKEK ATQMLAIVLG VFIICWLPFF ITHILNIHCD CNIPPLYSA FTWLGYNVNSA VNPIIYTTN IEFRAFLKI LHC</p>	
103	1243	Dopamine Receptor D3	NM_000796	<p>taaagaaaac ggatacattc gaaagcagct atgaacacatg cactaaggtc taatagggaa A gctggaaaag cagcactcaa gtaatttcac cttagaggca aaaaagggtg atttctttct gttcatttca tagtttctga gtcctgagaa aggcaaaagt tgctttgctt gggatgtctt gctgtcagta aatggctgca ggagccgaag tggtaaacctc ctgggtctcc agaaatcaga agaaaatttt aggaagcccc ttggcatcac gcacctccct gctggctatg gcatctctga gtcagctgag tagccacctg aactacacct gtggggcaga gaactccaca ggtgccagcc agggcccgccc acatgcctac tatgcccctt cctactcctg gctcatcctg gccatcgctt tcggcaatgg cctggtgtgc atggctgtgc tgaaggagcg ggcctgagc actaccacca actacttagt agtgagcctg gctgtggcag acttgcgtgt ggcaccttg gtgatgccct gggtgtgata cctggaggtg acaggtggag tctggaaattt cagccgcat tgcgtgtgatg tttttgcac cctggatgtc atgatgtgta cagccagcat cctaatctc tgcgccatca gcatagacag gtacactgca gtggtcatgc ccgttccacta ccagcatggc acgggacaga</p>	Homo sapiens

106	1244	Dopamine Receptor D4	NP_000788.1	<p> cctgcctgct cctgcccccc gcggtggtgc agcgccgtca cctggctggg ctacgtcaac agcgccctca acccgtcat ctacactgc ttcaacgccc agttccgcaa cgtcttccgc aaggccctgc gtgcctgctg ctgagccggg caccgccgga cgcgcccgcc cctgatggcc agggcctcagg gaccaaggag atggggaggg cgcttttcta cgtaattaa acaattcct tccc </p>	Homo sapiens
107	1267	Opioid Receptor, delta 1 (OPRD1)	NM_000911	<p> TERALQPTN SFIVSLAAD LLLALLVLEL FVYSEVQGA WLLSPRLCDA LMAMDVMLCT ASIFNLCAIS VDRFVAVAP LRYNRQGSR RQLLLIGATV LLSAAVAAPV LCGLNDVVRGR DPAVCRLEDR DYVYSSVCS FFLPCPLMLL LYWATFRGLQ RWEVARRAKL HGRAPRRPSG PGPPSPTRPA PRLPQDPCGP DCAPPAPGLP RGPCGPDCAF AAPGLPPDPC GPDCAAPPAG LPQDPCGPDPC APPAPGLPRG PCGPDCAAPP PGLPQDPCGP DCAPPAPGLP PDPCGSNCAP PDAVRAAALP PQTTPQTRRR RRAKITGRER KAMRVLVVV GAFLLCWTFP FVHITQALC PACSVPPRLV SAVTWLGYN SALNPVITYV FNAEFRNVER KALRACC </p>	Homo sapiens
				<p> cggaggagcc tgcgtgctc ctggctcaca gcgctccggg cgaggagagc gggcgaggcc A gggggctggg ccggtgcggg cggcgaggca ggcggacgag gcgcagagac agcgggggcg ccggggcgcg gcacggcgcg ggtcggggcc ggctctgccc ttgcgctcc cctcgcgtcg gatecccgcg ccaggcagc cgggtggagag ggaacggcgg gacggcgga gccatgggaa cgggccctcc cgcggcgcc gagctgcagc cccgctctt gcgcaacgcc tcggacgcct accctagcgc ctccccagc gctggcgcca atgctcggg gcccaggga ccggggagcg cctcgtccct cgcctggga atcgccatca ccgcgtctta ctcggcgtg tgcgcgtgg ggctgctggg caactgctt gtcattgtcg gcatcgctcg gtacactaag atgaagacgg ccaccaacat ctacatctc aactggcct tagcgtatgc gctggccacc agcacgctgc ctttccagag tgccaagtac ctgatggaga cgtggccctt cggcgagctg ctctgcaagg ctgtgctctc catcgactac tacaatatgt tcaccagcat cttcacgctc accatgatga gtgttgaccg ctacatgct gtctgccacc ctgtcaaggc cctggacttc cgcacgctg ccaaggccaa gctgatcaac atctgtatct gggctcctggc ctcaggcgtt ggcgtgcccc tcattggtcat ggtgtgacc cgtccccggg acggtgcagt ggtgtgcagt ctccagttcc ccagccccag ctggtactgg gacacgggtga ccaagatctg cgtgttctc ttgccttcg tgggtccccat cctcactac accgtgtgct atggcctcat gctgctgccc ctgcgcagtg tgcgccctgct gtcgggctcc aaggagaagg accgcagcct gggcgccatc acgcgcatgg tgctggtggt tgtgggccc tctgtgtgtg gttgggccc catccacatc ttgctcatcg tctggacgct ggtggacatc gaccggcgcg acccgctggt ggtggtgctg ctgcacctgt gcatcgctg gggctacgccc aatagcagcc tcaacccccg gctctacgct ttctcgcagc agaacttcaa gcgtgcttc cgcagctct gccgcaagcc ctgcggccgc ccagacccca gcagcttcag ccggccccgc gaagccacgg ccgcgagcg tgtcacccgc tgacccccgt ccgatggtcc cggcggtggc cgtgcgcct gaccaggcca tccggcccc agacgcccc ccctagtgt accggaggc cacatgagtc ccagtggag gcgcagacca tgatgtggag tggggccagt agataggtcg gagggctttg ggaccgccc atggggcctc tgtttcggag acgggaccgg gccgctagat gggcatgggg tggcctctg gtttggggcg aggcagagga cagatcaatg gcgcagtgc tctggtctgg gtgccccgt ccacggctct aggtggggcg ggaagccag tgactccagg agaggagcg gacctgtggc tctacaactg agtctttaa </p>	

108	1267	Opioid Receptor, delta 1 (OPRD1)	NP_000902.1	caggcatct ccaggaaggc ggggcttcaa ccttgagaca gcttcgggtt ctaacttggg gccggactt cggagtggg gggcggggg ccc MEPAPSAGAE LQPLFANAS DAYSAFPSA GANASGPPGP GSASSLALAI AITALYSAVC P AVGLLGNVLV MFGIVRYTKM KTATNIYIFN LALADALATS TLPFQSAKYL METWPFGE LL CKAVLSIDY NMFTSIFTLT MMSVDRIYIAV CHPVKALDFR TPAKAKLINI CIWVLASGVG VPIMVMATVR PRDGAUVCM L QFPSPSWYWD TVTKICVFLF AFVVPILIT VCYGLMLLRL RSVRLLSGSK EKDRSLRRIT RMVLVVVGA F VVCWAPIHIF VIVWTLVDID RRDPLVVAAL HLCIALGYAN SSLNPVLYAF LDENFKRCFR QLCKRKPCGRP DPFSSFRPRE ATARERTAC TFSDGPGGGR AA	Homo sapiens
109	1424	Duffy Antigen	NM_002036	gggcctgaac caaacggtgc catgggggac tgtctgcaca gggtagatat ggggccaggc A cccagagatcc cttatcccta tgcctccatc ttcctccgtt gtttggccct cagctcttat atctcttctt tttccctctc atcttttctc ccttcccgct ttttccctct tcttcaaaag tcttttctct tctctcttc ctagctagc cctcagctc cctcttgtt cctcctctt gcctttgagt cagttccatc ctggtctctt ggtgcctttc cttctgacct tgcactgtc ctccagcccc agctgacct gcttccccag gactgttcc cctccggctc tccaggtccc ctgctttgtc cttttccact gtcgcgactg catctgactc ctgcagagac cttgttctcc caccgacct tctctctgt cctccctcc cactggccc tcaattccca ggagactctt ccggtgtaac tctgatggc tctctgggt atgtctcca ggcggagctc tccctccaa ctgagaactc aagtcagctg gacttcgaag atgtatgaa tcttccctat ggtgtgaatg attccttccc agatggagac tatgatgcca acctggaagc agctgcccc tgcactcct gtaacctgct ggatgactct gcactgacct tcttcatcct caccagtgc ctgggtatcc tagctagcag cactgtctc tcatgcttt tcagacctct cttccgctgg cagctctgcc ctggctggcc tgcctggca cagctggctg tgggcagctg cctctccagc attgtggtg ccgtcttggc cccagggcta ggtagactc gcagctctgc cctgtgtagc ctgggctact gtgtctggta tggctcagc tttgcccagg tcttgcctgt aggtgtccat gcctccctgg gccacagact ggggtcaggc caggtccag cctcaccct ggggtccact gtgggaattt ggggagtggc tgcctactg acactgctg tcacctggc cagtggtgct tctggtggac tctgcacct gataacagc acgagctga aggtcttga ggcacacac actgtagcct gtcttgccat ctttgtctt tggccattg gttgttttg agccaagggg ctgaagaagg cattgggtat ggggccaggc cctggatga atactctgt ggcctgggtt atttctggt ggcctcatgg ggtggttcta ggaactggatt tctgtgtgag gtccaagctg ttgctgtgt caacatgtct gcccagcag gctctggacc cctctgccc tgcctatt ctgccaccag gccaccgca ttttgcaactg tgtggctacg cccctgccc gatggtctt ccatctggac acccttgga ccctcttggc ctctctgccc cctcctgaag gatggtctt ccatctggac acccttgga gcaaatcccta gttctcttc cactgtcaa cctgaattaa agtctacact gcctttgt NP_002027.1 DSALPFILT SVLGILASST VLFMLFRPLF RWQLCPGWV LAQLAVGSAL FSIIVPVLAP P GLGSTRSSAL CSLGYCVWYG SAFAQALLLG CHASLGHRLG AGQVPGTLTG LTVGIWGVAA LLTLPVTLAS GASGGLCTLI YSTELKALQA THTVACLAI F VLLPLGLFGA KGLKKALGMG PGPWNILWA WFIWPHGV VIGLDFLVR KLLLSSTCLA QQALDLLLLNL AEALILHCV ATPLLLALFC HQATRTLLPS LPLPEGWSSH LDTLGSKS	Homo sapiens
110	1424	Duffy Antigen	NP_002027.1	gcaaatcccta gttctcttc cactgtcaa cctgaattaa agtctacact gcctttgt NP_002027.1 DSALPFILT SVLGILASST VLFMLFRPLF RWQLCPGWV LAQLAVGSAL FSIIVPVLAP P GLGSTRSSAL CSLGYCVWYG SAFAQALLLG CHASLGHRLG AGQVPGTLTG LTVGIWGVAA LLTLPVTLAS GASGGLCTLI YSTELKALQA THTVACLAI F VLLPLGLFGA KGLKKALGMG PGPWNILWA WFIWPHGV VIGLDFLVR KLLLSSTCLA QQALDLLLLNL AEALILHCV ATPLLLALFC HQATRTLLPS LPLPEGWSSH LDTLGSKS	Homo sapiens

111	1451	EBV-Induced Gene 2	NM_004951	<p>ggaattccct gatacaccc tggaccacca ccaatggata taaaaatggc aaacaatttt A</p> <p>actccgccct ctgcaactcc tcagggaat gactgtgacc tctatgcaca tcacagcacg</p> <p>gccaggatag taatgcctct gcattacagc ctgctcttca tcaatgggct cgtgggaaac</p> <p>ttactagcct tggctgctcat tgttcaaac aggaataaaa tcaactctac caccctctat</p> <p>tcaacaaatt tggtagtttc tgatatactt ttaccaccg ctttgccctac acgaatagcc</p> <p>tactatgcaa tgggctttga ctggagaatc ggagatgcct tgtgtaggat aactgcgcta</p> <p>gtgttttaca tcaacacata tgcagggtg acctttatga cctgctgag tattgaccgc</p> <p>ttcattgctg tggtagccct tctacgctac aacagataa aaaggattga acatgcaaaa</p> <p>ggcgtgtgca tattgtctg gattctagta tttgctcaga cactcccaat cctcatcaac</p> <p>cctatgtcaa agcaggaggc tgaaggatt acatgcattg agtatccaaa ctttgaagaa</p> <p>actaaatctc ttcctctggat tctgcttgg gcattgttca taggatattg acttccactt</p> <p>ataatcattc tcatctgcta ttctcagatc tctgcaaac tcttcagaac tgccaaacaa</p> <p>aaccactca ctgagaaatc tgggttaac aaaaaggctc tcaacacaaat tattcttatt</p> <p>attgttgtgt ttgttctctg ttccacacct taccatgttg caattattca acatatgatt</p> <p>aagaagcttc gtttctctaa tttcctggaa ttagtgcataa gacattcgtt ccagatttct</p> <p>ctgcacttta cagtagcctt gatgaacttc aattgctgca tggacccttt tatctacttc</p> <p>tttgcattga aagggtataa gagaagggtt atgagtagtc tgaacggca agtcagtga</p> <p>tcgatttcta gtgctgtgaa gtccagccct gaagaaatc cagtgaaat gacagaaacg</p> <p>cagatgatga tacattccaa gtcttcaaat ggaagtga atggattga ttttgggtta</p> <p>tagtgacgta aactgtatga caaactttgc aggaactccc ttataaagca aaataattgt</p> <p>tcagcttcca attagtattc ttttatattt ctttcatgtg gcactttccc atctccaaat</p> <p>cggaaagtaag ccaagagaa caacataaag caaacacat aaagcacaat aaaaatgcaa</p> <p>ataaatattt tcatttttat ttgtaaacga atacaccaa aggagggcct cttataaact</p> <p>cccaatgtaa aaagttttgt tttaataaaa aatttaatta ttatttctg ccaacaaatg</p> <p>gctagaaagg actgaataga ttatatattg ccagatgta atactgtaac atacttttta</p> <p>aataacatat ttcttaaatc caaatttctc tcaatgttag atttaattcc ctcaataaca</p> <p>ccaatgtttt gtttgtttc gtctgggtc ataaaacttt gtttaaggaa tcttttgaa</p> <p>taaagagcag gatgctgc</p>	Homo sapiens
112	1451	EBV-Induced Gene 2	NP_004942.1	<p>MDIQANNFT PPSATPQND CDLYAHSTA RIVMPLHYSL VFIIGLVNL LALVVIVQNR P</p> <p>KKINSTLYS TNLVISDILF TTALPTRIAY YAMGFDWRIG DALCRITALV FYINTYAGVN</p> <p>FMTCLSIDRF IAVVHPLRYN KIKRIEHAKG VCIFVWILVF AQTLPILLINP MSKQEAERIT</p> <p>CMEYPNFEET KSLPWILLGA CFIGYVLP LI IILICYSQIC CKLFRTAKQN PLTEKSGVWK</p> <p>KALNTIILII VWFVLCFTPY HVALIQHMIK KLRFSNFLEC SQRHFSQISL HFTVCLMNFN</p> <p>CCMDPFIYFF ACKGYKRVKM RMLKRQVSVS ISSAVKSAPE ENSREMTETQ MMIHSKSSNG</p>	Homo sapiens
113	1486	Endothelin B Receptor	NM_000115	<p>gagacattcc ggtgggggac tctggccagc ccgagcaacg tggatcctga gagcactccc A</p> <p>aggtaggcat ttgccccggt gggacgcctt gccagagcag tgtgtggcag gccccgtgg</p> <p>aggatcaaca cagtggctga acactgggaa ggaactggta cttggagtct ggacatctga</p> <p>aacttggctc tgaactgcg cagcggccac cggacgcctt ctggagcagg tagcagcatg</p> <p>cagccgcctc caagtctgtg cggacgcgcc ctgggttgcg tggttcttgc ctgcggcctg</p> <p>tcgcggatct ggggagagga gagaggcttc ccgctgaca gggccactcc gcttttgcaa</p>	Homo sapiens

accgcagaga taatgacgcc accactaag acctatggc ccaagggttc caacgccagt
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gcaggtagca cctctctca ccatgctgt ggttaaaatg gttttagca tatgtataat
gctatagtta aaatactatt tttcaaaatc atacagatta gtacatttaa cagctacctg
taagcttat tactaattt tgtattattt ttgtaaatag ccaatagaaa agtttgctt

114	1486	Endothelin B NP_000106.1 Receptor	<p> acatgggtgct ttcttttcat ctgagggcaa aactgctttt ttgagaccgt agaactctct agctttgtgc gtctctgcct aatttttata tcttctaagc aaagtgcctt aggatagctt gggatgagat gtgtgtgaaa gtatgtacaa gagaaaacgg aagagagagg aaatgaggtg gggttggagg aaacccatgg tccgtgattt gtccagcaa aacacagtgc aatgttctca gagtacatt cgaaataaat tggggccaaag agctttaact cgtctttaa atatgccaa atcttttact ttgttttctt ttaataaggct gggtccacatg ttggaaataa gctagtaatg ttgttttctg tcaatattga atgtgatggc acagtaaac accaccaac aatgtggcca gaaagaaaga gcaataataa ttaattcaca caccatattg attctattta taaatcacc acaaacttgt tctttaatt catccaatc actttttcag aggcctgtta tcatagacc catttttagac tctcaatttt aaattaatt tgaatcacta atattttcac agttttata tatattaat ttctatttaa attttagatt atttttata ccatgtactg aatttttaca tcttgatacc ctctctctct ccatgtcagt atcatgttct taaattatct tgccaaattt tgaactaca cacaataagc atacttgcat tatttataat aaatttgcac tcatgtgctt tttaaaaaaa atgtttgatt caaaacttta acatactgat aagtaagaaa caattataat ttctttacat actcaaaacc aagatagaaa aggtgtctat cgttcaactt caaaacatgt ttcttagtat taaggacttt aatagtagaa cagacaaaat tattgttaac atggatgtta cagctcaaaa gatttataaa agatttttaac ctattttctc cctattatc cactgtaaat gtggatgtat gttcaaacac cttttagtat tgaatgctta catatggcca aagaaataca gtttatagca aaacatgggt atgctgtagc taacttata aaagtgtaat ataacaatgt aaaaaattat atactgtgga ggattttttg gtgcctaaa gtggtctatg ttactgattt tttattatgt aagcaaaacc aataaaaaat taagtttttt taacaactac cttatttttc actgtacaga cactaattca ttaataacta attgattgtt taaaagaaat ataaatgtga caagtggaca ttatttatgt taaatataca attatcaagc aagtatgaag ttattcaatt aaaatgccac atttctgttc tctggg </p>	Homo sapiens
115	1488	Endothelin A NM_001957 Receptor	<p> MPPPSLCGR ALVALVLAGG LSRWGEERG FPPDRATPLL QTAEIMTPPT KTLWPKGSNA P SLARSLAPAE VPKGDRTAGS PPTISPPPC QGPPIKETF KYINTVVSCL VFVLGIIGNS TLRLIYKNK CMRNGPNILI ASLALGDLH IVIDIPINVY KLLAEDWPPFG AEMCKLVPFI QKASVGITVL SLICALSIDRY RAVASWSRIK GIGVPKWTAV EIVLIWVSV VLAPEAIGF DIIITMDYKGS YLRICLLHPV QKTAFMQFYK TAKDWLFSF YFCLPLAITA FFYTLMTCEM LRKKSQMQIA LNDHLKORRE VAKTVFCLVL VFALCWLPPLH LSRILKLTLY NQNDPNRCEL LSFLLVLDYI GINMASLNSC INPIALYLV KRFKNCFKSC LCCWCQSFEK KQSLEEKQSC LKFKANDHGY DNFRSSNKYS SS </p>	Homo sapiens

caagatggaa accctttgcc tcaggggcacc cttttggctg gcactgggtg gatgtgtaat
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cacctccat tctcttaatt tttgttaaaa tgttaactgg cagtaagtct tttttgatca
ttccctttc catataggaa acataatttt gaagtggcca gatgagtta tcatgtcagt

116	1488	Endothelin A Receptor	NP_001948.1	<p>gaaaaataat taccacaaa tgccaccagt aacttaacga ttcttcaactt cttgggggttt ttagtatgaa cctaaactccc caccacaaca tctccctccc acattgtcac catttcaaaag ggccacaggt gacttttgtt ggtgtgtatg ggtgtgtatg ggtgtgtatg ggtgtgtatg aaaaatcttt actagtgtgt ggtgtgtatg ggtgtgtatg ggtgtgtatg ggtgtgtatg atctttctag actgtctctg ggtgtgtatg ggtgtgtatg ggtgtgtatg ggtgtgtatg ggtgtgtatg ggtgtgtatg ggtgtgtatg ggtgtgtatg ggtgtgtatg ggtgtgtatg gtctgagcta aactctaggt gattgttcat catgacaacc tgccctcagtc cattttaacc tgtagcaacc ttctgcattc ataaatcttg taatcatgtt accattacaa atgggatata agaggcagcg tgaagcaga tgagctgttg aactgaata taggtttttg ttgtgtgtgt tggtttgata agcagttat tggtgtctat ttgtttcttg tgctggagca aagtcatta cacittgaag tattatattg ttcttatctt caattcaatg tggtgatgaa atggccaggt tgctgatat ttctttcaga cttgcacaga cagattgtgt ataataaatt aggtgaagata atgtgtggg ccataattta ggacaggtaa aataacatca ggttccagtt gcttgaattg caaggctaag agtactgct cttttgtgtg ttagcagtc aatctattat tccactggcg catcatatgc agtatatat gcttataata taagccatag gttcacacca tttgttttag acaattgtct ttttttcaag atgttttgtt tcttcatat gaaaaaaatg cattttataa attcagaaag tcatagattt ctgaaggcgt caactgtcat tttatttatg gactggtaag taactgtgtt ttactagcag gaattatttc aatttctacc tttactacat cttttcaaca agtaactttg tagaaatgag ccagaagcca aggcctgag ttggcagttg ccataaagtg taaaataaaa gtttacagaa acctt</p>	Homo sapiens
117	1598	Calcium-Sensing Receptor (CASR)	NM_000388	<p>caacaggcac ctgggtgcag ccaggaagga ccgacagccc ttctgcgcag gagagtggaa A ggaggagct gtttgcagc accgaggtct tgcggcacag gcaacgcttg acctgagctt tgcagaatga aaggcatcac agggagcctc tgcagatagt ggttccaaa gactcaagga ccaccacat tacaagtctg gattgaggaa ggcagaaatg gagattcaaa caccacgtct tctattattt tattaatcaa tctgtagaca tgtgtcccca tgcagggag tgaactgtct caaggagaa acttctggga gcttccaaac tctagctgt ctcacccctt gccctggaga gacggcagaa ccatggcatt ttatagctgc tgcgtgggtcc tcttggcact cactggcac acctctgctt acgggcccaga ccagcagacc caaaagaagg gggacattat ccttggggg ctctttccta ttcatttttg agtagcagct aaagatacag atctcaaatc aagggcggag tctgtggaat gtatcaggta taatttccgt ggttttcgtt ggttacaggc tatgatatt gccatagagg agataaacag cagcccagcc cttcttccca acctgacgct gggatacagg atatttgaca cttgcaacac cgttttctaag gccttggag ccaccctgag ttttgttct caaaacaaaa ttgattcttt gaaccttgat gatttctgca actgctcaga gcacattccc</p>	Homo sapiens

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aagagcaaca gcgaagacc attcccacg ccctgaggc agaagcagca gcagcgtg
gccttaacc agcaagagca gcagcagcag cccctgaccc tcccacagca gcaacgatct

118	1598	Calcium- Sensing Receptor (CASR)	NP_000379.1	<p> cagcagcagc ccagatgcaa gcagaaggtc atctttggca gggcagcggc cactttctca ctgagctttg atgagcctca gaagaacgcc atggcccacg ggaattctac gcaccagaac tccctggagg ccagaaaaa ggcgatacag ctgaccgcag accagcatt actcccgctg cagtgcgggg aaacggactt agatctgacc gtccaggaaa caggtctgca aggacctgtg ggtggagacc agcggccaga ggtggaggac cctgaagagt tgtccccagc acttgtagtg tccagttcac agagctttgt catcagtggt ggagggcagca ctgttacaga aaacgtagtg aattcataaa atggaaggag aagactgggc tagggagaat gcagagaggt ttcttggggg cccagggatg aggaatcgcc ccagactcct ttcctctgag gaagaaggga taatagacac atcaaatgcc ccgaatttag tcacaccatc ttaaatgaca gtgaattgac ccatgttccc ttt </p>	Homo sapiens
				<p> LALTWHTSAY GPDQRAQKKG DIILGGLFPI HFGVAAKDQD LKSRPESVEC P IRYNFRGFRW LQAMIFAIEE INSSPALLPN LTLYGRIFDT CNTVSKALEA TLSFVAQNKI DSLNLDEFNC CSEHIPSTIA VVGATGSGVS TAVANLLGLF YIPQVSYASS SRLLSNKNQF KSFLRTIPND EHOATAMADI IEYFRWNWVG TIAADDDYGR PGIEKFREEA EERDICIDFS ELISQYSDEE EIQHVVEVIQ NSTAKVIVF SSGPDLEPLI KEIVRRNITG KIWLASEAWA SSSLIAMPQY FHVVGGTIGF ALKAGQIPGF REFLLKVHPR KSVHNGFAKE FWEETFNCHL QEGAKGPLPV DTFLRGHEES GDRESNSTA FRPLCTGDN ISSVETPYID YTHLRISYNV YLAVYSIAHA LQDIYTCPLG RGLFTNGSCA DIKKVEAWQV LKHLRHLNFT NNMGEQVTFD ECGDLVGNYS IINWHLSPED GSIVFKEVGY YNVVAKHGER LFINEEKILW SGFSREVFPF NCSRDCLAGT RKGIEGEPT CCFECVECPD GEYSDEFDAS ACNKCPDDFW SNENHTSCIA KEIEFLSWTE PFGIALTLFA VLGIFLTAFL LGVFIFERNF PIVKATNREL SYLLFSLLC CFSSSLFFIG EPQDWTCLRL QPAFGISFVL CISCILVKTN RVLLVFEAKI PTFHRKMWG INLQFLLVFL CTFMQIVICV IWLYTAPPSS YRNOLEDEI IFITCHEGSL MALGFLIGYT CLLAAICFFF AFKSRKLPEN FNEAKFITFS MLIFFIVWIS FIPAYASTYG KFVSAREVIA ILAAAFGLLA CIFFNKIYII LFKPSRNTIE EVRCSTAHA FKVAARATLR RSNVSRKRSS SLGGSTGSTP SSSISSKSNs EDPFPQPERQ KQQPLALITQ OEQQQQPLTL PQQQRSSQQP RCKQKVI FGS GTVTFSLSF EPQKNAMAHG NSTHQNSLEA QKSSDTLTRH QPLLPLQCGE TDLDLTVQET GLQGPVGGDQ RPEVEDPEEL SPALVVSSSQ SFVISGGST VTENVVNS ggcacgagga acaacctatt tgcaaaagtg gcgcaaacat tcctgcctga caggaccatg A gacacagggt gtagagatag agatggctct ggctgtgcat tcagcagatt ctgtagatag aattaatagg acttgatgg gattgtggtg agagaaagtg aaatgaaaga taagtcttag tttggaaggt ttaacaactg aatgttttaa ctcaaataga cacaaaatat tggaagagtg gcaggtttgg gaggatgaga caatcaactg tttggttgag ccacgttagg ttgaaatgt ctacgggac ccgtgggag aggttatatc agactggagc accagagaga ggccaaggct gatagtttag atgaaaagag agcatgatat ttaagccct gagactggat aatatcacct atagaaagac tataataga taagagaggt ggggaacaa ggggactgaa aagcgggtggc taaatttaga gtcaaattha gacagaaaa tactatcaaa cattatcat ctcatggcac caattgagct tcaaatgcaa gtgaaagtgt gttgtgtgta cttatcat ctcatggcac aggaaaaacg tgatttaagg agaaggaagc gatccaatgg gaagaagaga tccaatggat cctctatcac gaagatatgg agataagaac caatatggat ttgcacccac tgcatttgca gccttgaggt cataagcatc ctcaggaaaaa tgcaccagggt gctgctggca agatggaaaac </p>	Homo sapiens
119	1676	Formyl Peptide Receptor- Like Receptor	NM_001462		

120	1676	Formyl Peptide Receptor- Like Receptor	NP_001453.1	caactttctcc actcctctga atgaatatga agaagtgtcc tatgagtctg ctgggtacac tgttctgagg atcctcccat tgggtgtgct tgggtgcacc tttgtcctcg ggggtcctggg caatgggctt gtgatctggg tggctggatt ccgagtgaca cgcacagtca ccaccatctg ttacctgaac ctggccctgg ctgacttttc ttccacggcc acattaccat tctcatctgt ctccatggcc atgggagaaa aatggccttt tggctggctt ctgtgtaagt taattcacat cgtggtggac atcaacctt ttggaagtgt ctcttgatt ggtttcattg cactggaccg ctgcatttgt gtcctgcac cagctctggg ccagaaccac cgcactgtga gtctggccat gaaggtgac gtcggacctt ggattcttgc tctagtctt accctggcag tttcctctt tttgactaca gtaactatt caaatgggga cacatactgt acttcaact ttgcatcctg gggtggcacc cctgaggaga ggctgaaggt ggccattacc atgtgacag ccagaggat tatccgggtt gtcattggct ttgcttgcc gatgtccatt gttgcatct cctatgggt cattgcagcc aagatccaca aaaggggcat gattaaatcc agcgtccct tacgggtcct cactgctgtg tggcttctt tcttcatctg ttggtttccc ttcaactgg ttgcccctt gggcaacctc tggctcaaa agatgttgtt ctatggcaag tacaataatca ttgacatcct ggtaaccca acgagctccc tggccttctt caacagctgc ctcaacccca tgccttaact cttctgggc caagacttcc gagagagact gaccactcc ctgccacca gtctggagag ggccctgtct gaggactcag ccccaactaa tgacacggct gccaattctg cttcacctcc tgcagagact gacttacagg caatgtgagg atggggctcag ggataatttg agttctgttc atcctaccct aatgccagt ccagcttcat ctacccctga gtcataatga ggcattcaag gatgcacagc tcaagtattt attcaggaaa aatgcttttg tgtccctgat ttggggctaa gaaatagaca gtcaggctac taaaatatta gtgttattt ttgtttttg actctgct ataccctggg gtaagtggag ttgggaaata caagaagaga aagaccagt gggatttgta agacttagat gagatagcgc ataataaggg gaagacttta aagtataaag taaaatgttt gctgtagggt ttttatagct attaaaaaaa atcagattat ggaagtcttc tctattttt agtttgctaa gacttttctg tttcttttcc ttacatcatg agtggacttt gcattttatc aaatgcaatt tctacatgta ttaagatggt catattattc ttcttcttt atgtaaatca ttataaataa tgttcattaa gtctggaatg ttaaaactact cttgaattcc tggaataaac cacactagt cctgatgtac tttaaatatt tatatctcac aggagttgggt tagaatttct gtgttatgt ttatatactg ttatttcaat ttttctacta tcttgctaa gttttcatag aaaaaagga acaagagaa acttgaatg gtctctgaaa aggaattgag aagtaattcc tctgattctg tttctgggtg ttatatcttt attaaatatt cagaaaaatt c tctgattctg tttctgggtg ttatatcttt attaaatatt cagaaaaatt c	Homo sapiens
121	1681	Follicle Stimulating Hormone Receptor	NM_000145	NP_001453.1 TTCYNLALA DFSFTATLPF LIVSMANGEX WPFGWFLCKL IHVVDINLF GSVFLIGFIA LDRICICVLP VWAQNHRTVS LAMKVIVGPW ILALVLTLPV FLFLTVPITP NGDTYCTFNF ASWGGTPEER LKVAITMLTA RGIIRFVIGF SLPMSIVAIC YGLIAAKIHK KGMIKSRPL RVLTAWASF FICWFFQVLV ALLGTWVWKE MLFYGYKII DLVNPTSSL AFFNSCLNPM LYVFGQDFR ERLIHSPLTS LERALSDESA PTNDDTAANSA SPPAETELQA M cgctgagatc tgtggagggt tttctctgca aatgcagaaa gaaatcaggt ggatggatgc A ataattatgg cctgctcct ggtctctttg ctggcattcc tgagcttggg ctacagatgt catcatcgga tctgtcact ctctaacagg gtttttctct gccaaagagag caaggtgaca gagattcctt ctgacctccc gaggaatgcc attgaactga ggtttgtcct caccaagctt	Homo sapiens

123	1726	G Protein- Coupled Receptor RDC1	U67784	<p>VDYMTQARGQ RSSLAEDNES SYSRGFDMTY TEFDYDLCLNE VVDVTCSPKP DAENPCEDIM GYNILRVLIW FISILAITGN IIVLVILTS QYKLTVPREF MCNLAFAADLC IGIYLLLIAS VDIHTKSQXH NYAIDWQTGA GCDAAGFFTV FASELSVYTL TAITLERWHT ITHAMQLDCK VQLRHAASVM VMGWIFAFAA ALFPIFGISS YMKVSIICLPM DIDSPLSQLY VMSLLVLNLV AFVVICGCIY HIYLTVRNPN IVSSSDTRI AKRMRMLIFT DFLCMAPISE FAISASLKVP LITVSKAKIL LVLFHPINSC ANPFLYAIPT KNFRMRDFIL LSKCGCYEMQ AQIYRTETSS TVHNTHPRNG HCSSAPRVTS GSTYILVPLS HLAQN</p> <p>gccaactccg tgggtggtctg ggtgaatatc caggccaaga ccacaggcta tgacacgcac A tgctacatct tgaacctggc catggccgac ctgtgggttg tccctacccat cccagtcctgg gtggtcagtc tctgtcagca caaccagtgg cccatgggag agctcacgtg ccaagtcaca cacctcatct tctccatcaa cctcttcagc agcattttct tccacacgtg catgagcgtg gaccgtacc tctccatcac ctacttcacc aacaccccca gcagcaggaa gaagatggta gcgcgtgctg tctgcatcct ggtgtggctg ctggccttct gcgtgtctct gcctgacacc tactacctga agaccgtcac gctgctgctc aacaatgaga cctactgccg gtccttctac cccgagcaca gcatcaagga gtggctgac ggcattggagc tggctctcct tgtcttgggc tttgccgttc ccttctccat tatcgctgc tctacttcc tctggtccag agccatctcg gcgtccagt accaggagaa gcacagcagc cggaagatca tcttctccta cgtggtggct ttccttgtct gctgggtgcc ctaccacgtg gcggtgctgc tggacatctt ctccatctctg cactacatcc ctttccacct cggtgctggc cagcctctct tcacggccct gcattgtcaca cagtgcctgt cgctgggtga ctgctgcgtc aacctgtcc tctacagctt catcaatcgc aactacaggt acgagctgat gaaggccttc atcttcaagt actcggccaa aacagggtc accaagctca tcatgcttc cagagtctca gagacggagt actcgtcctt ggagcagagc accaaatgat ctgcccctga gaggtcttg gagcgggtta cttgtttttg aacagggtga tgggcccctat ggttttctag agcaaaagca agtagcttcg ggtcttgatg cttgagtga gtgaagagg gagcacgtgc cccctgcac aacaggcaga cctgtgtcgc acagcagtcg tcatttggtc gtgcgtgctg acagttttgc acaggttcg gcctggactt ctgtaagata ggattttctg tgtgcgtcag agccagctga ggcagggctt tatttaaat ttaagacttt attttctcac tgtttccctga attttttata tggtagtttg gttataaat ttttaaatat tgtttgggag tattggtgta cttataaat gtatttgaaa gttataaat tagttttaag gttagcgtga ctttcagttt gcatagtgct gacataat tgcactaat tgttagctgt ttgaaataa tatataata aataataaa tgactaagga tgactaata tcttggtgta aatgttttat ttaccatctg tgtggtgttt tataatgccag tcttggtgta aatgttttat gctttgtaat gcagtttgtg acattaaatag tgtaccggca cgggatattg aacgaaact gctttgtaat gctttgtaat acattaaatag tattgtaaa ttacatttta aataaaacaa aaaactgttc tggactgcaa atctgcacac acaacgaaca gttgcatttc agagagttct ctcaatttgt aagttatttt tttttaataa agatttttgt ttcctaaaaa aaaaaaaa aaaaaa</p> <p>MDLHLFDYAE PGNFSDISWP CNSSDCIVVD TVMCPNMPNK SVLLYLSFI YIFIFVIGMI P ANSVVVWVNI QAKTTGYDTH CYILNLAIAD LWWLTIPWV VVSLVQHNQW PMGELTCKVT HLIFSINLFS GIFFLTCMSV DRYLSITYFT NTPSSRRKKM RRVCILVWL LAFCVSLPDT YYLKTVTAS NNETYCRSEY PEHSIKEWLI GMELSVSVLG FAVPFSIIAV FYFLIARAI ASSDQEKHSS RKIIFSIVV FLVCWLPYHV AVLLDIFSIL HYIPFTCRLE HALFTALHVT</p>	Homo sapiens
124	1726	G Protein- Coupled Receptor RDC1	AAA62370.1	<p>MDLHLFDYAE PGNFSDISWP CNSSDCIVVD TVMCPNMPNK SVLLYLSFI YIFIFVIGMI P ANSVVVWVNI QAKTTGYDTH CYILNLAIAD LWWLTIPWV VVSLVQHNQW PMGELTCKVT HLIFSINLFS GIFFLTCMSV DRYLSITYFT NTPSSRRKKM RRVCILVWL LAFCVSLPDT YYLKTVTAS NNETYCRSEY PEHSIKEWLI GMELSVSVLG FAVPFSIIAV FYFLIARAI ASSDQEKHSS RKIIFSIVV FLVCWLPYHV AVLLDIFSIL HYIPFTCRLE HALFTALHVT</p>	Homo sapiens

125	1762	Galanin Receptor GalR1	NM_001480	AK	QCLSLVHCCV NPVLYSFNR NYRYELMKAF IFKYSAKTGL TKLIDASRVS ETEYSALEQN	A	Homo sapiens
					atccccgtag aatccgtcca gtctgtgtc ggcacccgtg acttctaagg ggcgcggatt	ggcgcggatt	
					tcagccgagc tgttttcgcc tctcagttgc agcagagaag cccctggcac ccgactctat	ccgactctat	
					ccaccaccag gaagcctccc aaaagagctc tcgcccctgt gacgactcgg aatccccgga	aatccccgga	
					aaagcccgga gggagtcgga ggcgccagcc cactggggag gtggcgttg ggcgcggga	ggcgcggga	
					tgccgccccg gccttctctg caggagccgc acagtgcact gctgcgctg ggcagctgcg	ggcagctgcg	
					gggaagcgcc gcgggaagga ggggtctcca gcaacaggtg cagcacgcag ccgctccggg	ccgctccggg	
					agccaggga aaccgcccgc gaagatcttg agcggttaag cggagagaa ggtctttcca	ggtctttcca	
					cctgcgggc tgcagccggc ggatccctct tcccaggctc cgtggtcgcg cagcggcgcg	cagcggcgcg	
					agggccccgg gcaggggacc ccagtgtctt cgagatcacc gtcccttccc gagaaggtcc	gagaaggtcc	
					agctccgggc tcccgaacc accctctctc agaaggtcgc ggcgcaaga cggtgccacc	cggtgccacc	
					agccacgggc accggatccc cgtcccgctt ggctcgcgc tggggggaag ctccagactcc	ctccagactcc	
					taaaactcgca ctctcgtgc ttggtgcggc gacccctggc caccctggc gctgtctatc	gctgtctatc	
					ccgccccccc tccccgcgcg ccccgccgct cgcgggaca gcccccggg ccatggagct	ccatggagct	
					ggcggtcggg aacctcagcg agggcaacgc gagctggccg gagccccccg ccccgagcc	ccccgagcc	
					cgggcccgtg ttccggatcg gctggagaa ctctgtcacg ctggtggtgt tcggcctgat	tcggcctgat	
					cttcgcgtg ggcgtgctg gcaacagcct agtgatcacc gtgtggcgc gcagcaagcc	gcagcaagcc	
					gggcaagccg cggagcacca ccaacctgtt catctcaac ctgagcatcg ccgacctggc	ccgacctggc	
					ctacctgtc ttctgcatcc ccttccagc caccgtgtac gcgtggcca cctgggtgct	cctgggtgct	
					gggcgcctc atctgcaagt tcatccacta ctcttcacc gtgtccatgc tggtagcat	tggtagcat	
					cttcacctg ccgcgatgt ccgtggaccg ctacgtggcc atcgtgcact cgcggcgctc	cgcggcgctc	
					ctctccctc aggggtccc gcaacgcgtt gctggcgtg gctggcatct gggcgctgtc	ggcgctgtc	
					cattgccatg gcctgcgccg tggcctacca ccaggccctc ttccacccgc gcgccagcaa	gcgccagcaa	
					ccagacctc tgcgggagc agtgccccga cctcgcccac aagaaggcct acgtggtgtg	acgtggtgtg	
					caccttcgtc ttccgctacc tgcgtccgct cctgctcacc tgcctctgct atgccaaagt	atgccaaagt	
					ccttaatac ttgcataaaa agttgaagaa catgtcaaa agtctgaag catccaagaa	catccaagaa	
					aaagactgca cagacagttc tgggtgtggt tgtgtgtgtt ggaatctcct ggctgccgca	ggctgccgca	
					ccacatcat catctctgg cctgcctggc cagcaattcc tccgtgaatc ctatcattta	ctatcattta	
					gtcagaatc accgcccact gctggcgta cagcaattcc tccgtgaatc ctatcattta	ctatcattta	
					tgcatcttc tctgaaaat tcagggaagg ctataaaca gtgttcaagt gtcacattcg	gtcacattcg	
					caaagattca cactgagt atactaaaga agataaagt cgaatagaca cccaccatc	ccccaccatc	
					aaccaattgt actcatgtgt gataaaagat agagtatcct tatggttgag ttccatata	ttccatata	
					agtggaaccg acacagaaac aaacagaatg agctagtaag cgaatgctga acttggtatc	acttggtatc	
					ttacaagaa ttcaagtct tttaattaaa tcccacgtgt gttaaaaagt actttgatcc	actttgatcc	
					atttaggaaa ttccctagtc tagtgagaat tatttttcaa ttattttta gttctaaat	gttctaaat	
					atgtttcaga aacaaaagac aatgctgtac agttttatc ctcttcagac atgaaaagga	atgaaaagga	
					acatatatat tccatatata tgttcaactc ttcatagatt gtgaactggc ccatcaatat	ccatcaatat	
					ggtcagggaat atttgcagtc tacattttta agccaattta tttagaaaaa aaatttgagc	aaatttgagc	
					tttaattctt taattttaag agaagtaata ttgtgaacta tgtattttta aatatgatca	aatatgatca	
					tggaacacaca atgatgaat ttttggccat ttacatagac atattctatta agtggaagaa	agtggaagaa	

126	1762	Galanin Receptor GalR1	NP_001471.1	aggtttcttg aagtctgttt gcacaggtgg catttgcttc caattgttagc tagcgacacag agctttggaa gcctgtcatt atgagataca gtcggtttac ctcaggagtc aattcagtg tgactgttg acctgggatg cagtagtagg cactgtgat tcaaatattat cctgtgaaac tggtttata gagttaacaa acacagagtca gagaccactg tcttaacagt ggaagatgca aataagtttt tgagaataaa actggatttt gaaattttac attagtactt gacaaaagt ttcattttgc ctgaaatgga acctactaaa agagagagatg aaaaaaaatc agcaggttg atgtagataa taattttcat gggaccataa agtagacaga attcagtaag tcacatgaag taatgggtcat gcctgtacat aaagcatatt tcatgtttga tttagatgac attcaaaaa aatcatggga ctgaatatac ctgggttatc ctatcttgta caaatgcacg ctttttcatt aaatttgtaa tgatgtttaa tgaacatttc caccaaacat tatctctctt aaaaatgta attgggggtt aaaaccatca ccatttgaat ttcaaatgta gttttcatga caattttata ttgatgtgtg tttacaatga gaaaatggca tgaataattt aaattgtctt gtatcg SKPKPRSTT NLFILNSIA DLAYLLFCIP FOATVYALPT GLIFALGVLG NSLVITVLAR P VSIFTLAAMS VDRYVAIVHS RRSSSLRVS RALLGVGCIW ALSIAMASPV AYHQGLFHR ASNQTFCEWQ WPDPRHKKAY VVCTFVFGYL LPHIIHLWA EFGVFPLTPA SFLEFRITAHK SKKTAQTVL VVVVFGISW LPHIIHLWA EFGVFPLTPA SFLEFRITAHK LAYSNSVNP IIYAFLENF RKAYKQVFKC HIRKDSHLS TKNKSRIDT PPSTNCTHV	Homo sapiens
127	1808	Gastric Inhibitory Polypeptide Receptor	NM_000164	ggcagcgggt gcaggggctg caggagcaag tgaccaggag caggactggg gacaggcctg A atcgccccctg cagcaaccag acccttgcc gccctcacga tgactacctc tccgactcctg cagctgtgc tgcgctctc actgtgcggg ctgctgctcc agaggcgga gacaggctct aaggggcaga cggcggggga gctgtaccag cgctgggaac ggtaccgcag ggagtgcag gagacctgg cagcgcgga accgcttca ggcctcgct gtaacgggtc cttecatatg tacgtctgct gggactatgc tgcacccaat gccactgcc gtgcgtctc cccctggtac ctgccccggc accaccatgt ggctgcaggt ttgtgagaa cagagaagaa tgagtgtggc caatggggac ttggagaga ccatacaca tctgtctctc gccagtgtg cagtgtatggc ctggaccaaa ggtcatctt ggagcgggtg caggtcatgt acaactgtcg ctactccctg tctctcgcca cactgtgct agcctgtct acgtctttca tgttcaggcg gctacattgc actagaaact atatccacat caactgttc acgtctttca tgtgcgagc tgcggccatt ctcagccgag accgtctgct acctgacct ggccttacc ttggggacca ggccttgcg ctgtggaacc aggcctcgc tgcctgccc agggcccaga tctgaccca gtagtcgtg ggtgccaact acacgtggct gctggtggag ggcgtctacc tgcacagtct cctggtgctc gtggagggt cagaggagg ccacttcgc tactacctg tctcggctg gggggcccc gcgttttctg tcatccctg ggtgatcgtc aggtacctg acagaaacac gcagtgtg gagcgcaacg aagtcaagc catttggtg attatacga ccccatct catgaccatc ttgattaatt tctcatctt tatccgcat ctgggcatc tctgtccaa gctgaggaca cggcaaatgc gctgcccga ttaccggctg aggtggctc gctccacgt gacgtggg ccccgtctg gtgtccaca ggtggtgtt gctcccgta cagaggaaca ggcggggg gccccgctg tgcacaagc cggctttgag atcttctca gctcctcca gggcttctg gtcagcgtcc tctactgctt catcaacaag gaggtgcagt cggagatccg ccgtggctg caccactgoc gcctgcccg cagcctggc gagagacaac gccagctccc ggagcgccc	Homo sapiens

128	1808	Gastric Inhibitory Polypeptide Receptor	NP_000155.1	<p>ttccggggccc tgcctccgg ctcgggccc ggcaggtcc ccaccagccg cggcttgctc</p> <p>tccgggaccc tccaggccc tgggaatgag gccagccggg agttggaag ttactgctag</p> <p>ggggggggat cccgtgtct gttcagttag catgattta ttgagtcca actgctgccc</p> <p>agcccagta cggaggacgc tgggaaatg gtgaagaaa cagaaaaag gtccctgccc</p> <p>ttctggagat gacaactgag tgggaaac agaccgtgaa cacaaacat caagtccac</p> <p>acacgtatg gaatggttat gaagggaagc gagaagggg cctaggtgg tctgggagc</p> <p>gtctccagg agtgacact taagccatcc ccgaagagg tgaagagat cactttggg</p> <p>agagctggag aacaggattc taggcggaag cagtagcag gcaaaagcc cttgggcagg</p> <p>aaggcgtca gccttggtg gactagaatt aagtcagag caacaggtt gggagagaca</p> <p>gagaagtgg cagggccacc caagtggga ttcatattca ggtgcattg agattcttag</p> <p>gagtgtctt tgggggtaatt attttattt ttaaaaaatg aggat</p>	<p>MTTSPILQLL LRLSLGLL QRAETGSKGQ TAGELYQWE RYRRCQETL AAAPPSGLA P</p> <p>CNGSFDMYC WDYAAPNATA RASCFWYLPW HHVAAAGFVL RCGSDGQWG LWRDHTQCE</p> <p>PEKNEAFDQ RLILERLQVM YTVGYSLSLA TLLALLILS LFRRLHCTRN YIHINLFTSF</p> <p>MLRAAAILSR DRLPRPGY LGDQALALWN QALACRTAQ IVTQYCVGAN YTWLLVEGVY</p> <p>LHSLLVLVGG SEEGHFRYIL LLGWGAPALF VIPWVIVRYL YENTQCWERN EVKAIWVIR</p> <p>TPILMTILIN FLIFIRILGI LLSKLRTQM RCRDYRLRLA RSTLTLPVLL GVHEVVFAPV</p> <p>TEEQARGALR FAKLGFELF SSFQGLVSV LYCFINKEVQ SEIRRGWHHC RLRRSLGEEQ</p> <p>RQLPERAFRA LPSCSPGEV PTERGLSSGT LPGPNEASR ELESYC</p>	Homo sapiens
129	1813	Gastrin- Releasing Peptide Receptor	NM_005314	<p>ccagattcta aataccagga aagacgtgt gggaaatag caggccaaa gtcttagta A</p> <p>aactgcagcc agggagactc agactagaat ggaggtagaa agaactgatg cagagtgggt</p> <p>ttaattctaa gccttttgtt ggctaagttt tgttgttgtt aacttattga atttagagt</p> <p>gtattgcact ggtcatgtga aagccagagc agcaccagtg tcaaaaatag gacagagagt</p> <p>tttgaatacc atagttagta tatatgtact cagagtattt ttataaaga aggcataag</p> <p>ccggcatag atcttatctt catcttcact cgtttgcaaa atcaatagtt aagaaatagc</p> <p>atctaaggga acttttaggt gggaataaaa atctagagat ggtctaaat gactgttcc</p> <p>ttctgaactt ggaggtggac catttcagc actgcaacat ctccagtcac agtgcggatc</p> <p>tccccgtgaa cgatgactgg tcccaccgg ggatcctcta tgtcatcctt gcagtttatg</p> <p>gggttatcat tctgataggc ctcatggca acatcaactt gatcaagatc ttctgtacag</p> <p>tcaagtccat gcgaacgtt ccaaacctgt tcaattccag tctggcttg ggaacctgc</p> <p>tcctcctaatt aacgtgtgct ccagtggtg ctgacccct ttatacagt taccctgtt ggggtgtctg</p> <p>ttggcaggat tggctgcaaa ctgacccct ttatacagt taccctgtt ggggtgtctg</p> <p>tcttcacact cagggcgtc tcggcagaca gatacaaac cattgtccg ccaatggata</p> <p>tccaggcctc ccatgccctg atgaagatct gcctcaaac cgcctttatc tggatcatct</p> <p>ccatgtgct ggcattcca gaggcgtgt tttctgacct ccatcccttc catgagaaa</p> <p>gcaccaacca gaccttcatt agctgtgcc cataccaca ctctaagtag cttcacccca</p> <p>aaatccattc tatggcttc tttctggtct tctacgtcat cccactgtc atcatctctg</p> <p>tttactacta cttcattgct aaaaatctga tccagagtgc ttacaatctt cccgtggaag</p> <p>ggaatataca tgtcaagaag cagattgaat cccggaagc acttgcaag acagtgtg</p> <p>tgttgtggg cctgttcgct tctgtgtgg tcccaatca tgtcatctac ctgtaccgt</p> <p>cctaccacta ctctgaggtg gacacctcca tgtccactt tgtcaccagc atctgtgccc</p>	<p>gtcttagta A</p>	Homo sapiens

130	1813	Gastrin- Releasing Peptide Receptor	NP_005305.1	<p>gcttcctggc cttcaccaac tctgcgtga accctttgc cctctacctg ctgagcaaga gtttcaggaa acagttcaac actcagctgc tctgttgcca gcttgccctg atcatccgtg ctcacagcac tggaggagat acaacctgca tgcctccct caagagtacc aacccctccg tggccacctt tagcctcatc aatggaaaca tctctcacga gcggtatgtc tagattgacc cttgattttg cccctgagg gacggttttg ctttatggct agacaggaac ccttgcatcc attgttgtgt ctgtgccc ccaaatgatg gatcaccatt atatttgaa agaagc gtggggagg ccaaatgatg gataccatt atatttgaa agaagc</p> <p>LIKIFCTVKS MRVFNLFIS SLALGDLILL ITCAPVDASR YIADRWLFGR IGCKLIPFIQ LTPSVGSVET LTALSADRYK AIVRPMDIQA SHALMKICLK AAFIWIISML LAIPEAVFSD LHPFHEESTN QTFISCAPYP HSNEHPKIH SNASFLVFYV IPLSIISVY YFIAKNLIQS AYNLPVEGNI HVKKQIESRK RLAKTVLVFV GLFAFCWLPN HVIYLYRSYH YSEVDTSMILH FVTSICARLL AFTNSCVNPF ALYLLSKSFR KQENTQLLCC QPGLIIRSHS TGRSTTCMTS LKSTNPSVAT FSLINGNICH ERYV</p>	Homo sapiens
131	1814	Cholecystoki nin B Receptor	NM_000731	<p>atggagctgc tcaagctgaa cggagcgtg cagggaaacc gaccgggccc gggggcttcc A ctgtgccgc cggggggccc tctctcaac agcagcagtg tgggcaacct cagctgcgag ccccctgca ttcgcgagc cgggacacga gaattggagc tggccattag aatcactctt tacgcagtga tcttctctgat gacggttga gaaatatgc tcatcatcgt ggtcctggga ctgagccgc gctgaggac tgtcaccaat gcttctctcc tctcactgac agtcagcagc ctcctgctgg ctgtggcttg catgcccttc accctcctgc ccaatctcat gggcacattc atctttggca cgtcatctg caaggcggtt tctacactca tgggggtgtc tgtgagtgtg tccacgctaa gcctcgtggc catcgccact gaggcgtaac gcgccatctg ccgaccactg caggcacgag tgtggcagac gcgctccac gcgctcgcg tgattgtagc cactggctg ctgtccggac tactcatggt gccctacccc gtgtacactg tccgccagac ctggtccgta cgtgtgtgc agtgcgtgca tgcgtggccc agtgcgccc tggccgtggc ctacgggctt ctgctgcttc tgccttctgt cttcatcccg ggtgtggtta tggccgtggc ctacgggctt atctctcgc agctctactt agggcttcgc tttgacggcg acagtacag cgacagccaa agcagggtcc gaaaccaagg cgggctgcca ggggctgttc accagaaagg gcgttgccgg cctgagactg gcggtgttg cgaagacagc gatggctgct acgtgcaact tccacgttcc cggcctgccc tggagctgac ggcgtgacg gctccagggc cgggattccg ctcgggccc acccaggcca agctgctggc taagaagcgc gtggtgcgaa tgttgcgtgt gatcgttgtg cttttttttc tgtgtgtgtt gccagtttat agtgccaaca cgtggcgccg ctttgatggc cgggtgtgac accgagcact ctgggtgtgt cctatctcct tcatcactt gctgagctac gcctcggcct gtgtcaacc cctggtctac tgcctcatgc accgtcgtt tccgaggcc tgccctggaaa ctgtgcctgc ctgctgccc cggcctccac gactcgtccc cagggtctt cccgatgagg accctccac tccctccatt gcttgcgtgt ccaggcttag ctacacacc atcagcacac tgggcccctg ctgaggagta gaggggccgt gggggttag gcagggcaaa tgacatgac tgaccttcc agacatagaa aacacaaacc acaactgaca caggaaacca acacccaaa catggactaa ccccaacgac aggaaaagg agcttacctg acacaagag aataagaatg gagcagtaca tgggaaagga ggcattgccc tgatatgga ctgagcctgg cccatagaaa catgacactg accttgaga gacacagcgt ccctagcagt gaactatttc</p>	Homo sapiens

132	1814	Cholecystostoki nin B Receptor	NP_000722.1	<p> tatacagtgg gaactctgac aagggtgtgac ctgacctctca cacacataga ttaatggcac tgattgtttt agagactatg gagctgtgga cagcagatgc tctggatgc tctagtttg acctcagatg gacctttccc aatcagcact gaaataacca ttaggcctaa tctcatacct ctgaccaaca ggctgttctg cactgaaaag gtcttctcat cctttccagt taaggaccgt ggccctggcc tctctctct tcccaaatg ttcaagaaat aataaatgt ttggcttctt cctgaaaaa aaaaaaaa aaaaaaaa aggaattcc MELLKLNRSV QGTGPGPGAS LCRPGAPLIN SSSVGNLSCE PPRIRGAGTR ELELAIRITL P YAVIFLMSVG GNMLIIIVLG LSRLRTVTN AFLLSLAVSD LLLAVACMPF TLLPNLMGTF IFGVICKAV SYLMGVSVSV STLSLVAIAL ERYSAICRPL QARVWQTRSH AARVIVATWL LSGLLMPYP VYTVVQPVGP RVLCQVHRWP SARVRQTWSV LLLLLFFIP GVMNAVAYGL ISRELYLGLR FDGSDSDSQ SRVRNQGLP GAVHQNGRCR PETGAVGEDS DGCYVQLPRS RPALELTALT APGPGSGSRP TQAKLLAKKR VVRMLLVIV LFFLCWLPVY SANTWRAFDG PGAHRLSQA PISFIHLISY ASACVNPLVY CFMHRFRQA CLETCARCCP RPPRARPRAL PDEDPTPSI ASLSRLSYTT ISTLGP </p>	Homo sapiens
133	1834	Glucagon Receptor	NM_000160	<p> ggatctggca gcgcgcgaa gacgagcggc caccggcgcc cgacccgagc gcgcccagag A gacggcgggg agccaagccg acccccgagc agcgccgcg gggccctgag gctcaaaaggg gcagcttcag gggaggacac cccactggcc aggacgccc aggcctctgt gctctgccac tcagctgccc tcggaggagc gtacacacac accaggactg cattgcccc gtgtgcagcc cctgccagat gtggaggaca gctagctgcc cagagctgcc cccctctgcc agccacagcg accctgtctg ctgttctgc tgcgtctggc ctgccagcca caggtccct cgcctcaggt gatggacttc ctgtttgaga agtggaaagt ctacggtgac cagtgctacc acaacctgag cctgctgccc cctccacgg agctggtgtg caacagaaac ttcgacaaat attcctgtctg gccggacacc cccgccata ccacggccaa catctctgc cctgggtacc tgccttggca ccacaaagtg caacacgct tcgtgttcaa gagatgcggg ccgacggtc agtgggtgcg tggacccccg ggcagcctt ggcgtgatgc ctcccagtc cagatggatg gcgaggagat tgagggtccag aaggaggtg ccaagatgta cagcagcttc caggtgatgt acacagtggg ctacagcctg tccctggggg cctgctctc gaatctgttt atcctggggg gctcagcaa gctgcactgc accgcgaatg ccataccagc gaatctgttt gctcctctg tgcgaaaagc cagctccgtg ctggtcattg atgggtgct caggaccgcg tacagccaga aaattggcga cgacctcagt gtcagcacct ggctcagtga tggagcgggt gctggctgcc gtgtggccgc ggtgttcatt caatatggca tegtggccaa ctactgctgg ctgctgggtg agggcctgta cctgcacaa cctgctggcc tggccacct ccccgagagg agcttctca gctctacct gggcatcggc tggggtgccc ccactgtgtt cgtcgtccc tgggcagtgg tcaagtgtct gttcgagAAC gtccagtgtt ggaccagcaa tgacaacatg ggcttctgtt ggatcctgcg gttccccgtc ttccctggca tccctgatcaa ctcttctc ttctccgca tctgtcagct gtctgtggcc agctgcggg caccggcagat gcaccacaca gaagtgtct tccggctggc caagtccacg ctgacctca tccctctgtt gggtgtccac gaagtgtct ttgccttctg gacggacgag cagccccag gcacctgctg cctccgcaa cctctctctg acctcttct cagctccttc cagggcctgc tgggtgctgt cctctactgc tctcacaac aggaggtgca gtcggagctg cggcgcgctt ggcaccgctg gcgctgggc aaagtgtat gggaggagcg gaacaccagc aaccacagg cctcatcttc gcccgccac gccctccca gcaaggagct </p>	Homo sapiens

134	1834	Glucagon Receptor	NP_000151.1	gagtttggg aggggtggtg gcagccagga ttcatctgag gagacccct tggctggtgg ctccctaga ttggtgaga gcccctctg aacctgtgtg ggaacccagc tagggctgga ctctggacc cagaggcgtc gctggacaa cagaactgtg acgcccagct gaggtggtg gcggtggagc caacagcagc ccccacctac cctgccttgt cctgggtgca gagtgagca gaggagtcca ttggcctcc tctccctgca cctgccttgt cctggaactg cgtgccagt tcccacgta tgtcggcacg ggcggtgagt ggggtggtg cctggaactg cctccacaa ctaagagctc aagtgtcac cgtg tccatgtgc atggaaatgt cctccacaa ctaagagctc aagtgtcac cgtg MPPCQPQRPL LLLLLLACQ PQVPSAQVMD FLFEKWKLYG DQCHNLSLL PPTELVCNR P TFDKYSCWPD TPANTANIS CPWYLPWHK VQHRFPKRC GPDGQWVRGP RGQWRDASQ QMDGEEIEV QKEVAKMYSS FQVMYTVGYS LSLGALLLAL AILGLSKLH CTRNAIHANL FASFVLKASS VLVIDGLLRT RYQKIGDDL SVSTWLSLSDG VAGCRVAADF MQYGIVANYC WLLVEGLYLH NLLGLATLPE RSFESLYLGI GWGAPMLFVV PWAVVKLFE NVQWTSNDN MGFWILRFP VELAILINEF IFVRIVQLLV AKLRAPQMHV TDYKFLAKS TLTLLPLLV HEVFAFVTD EHAQGLRSA KLFFDLFLSS FQGLIVAVLY CFLNKEVQSE LRRRWHRWRL GKVLWEERNT SNHRASSPG HGPPSKELQF GRGGGQDSS AETPLAGGLP RLAESEF ttggttgctg gtccacttac aaacactttt cataattgta tgtctttcca atggttatcc A tggtttgttc atttcaggca tatggccctg atcagattaa ctgacatgat gtatatgcaa agccttttga gttcttcaga aaataaatt atcttattca agactgattg cttataagga acttattata gctaataatag taggcacaa tttttttgta attctcctag atgagtcaga acttagtttt gatgtaggta aaaattttat ggtcacaaat ctgaggtgtg agaaaatctc tttccttgat actctatata aatagaggat ataaattttt caagctgtg agagagagga gaagctggta attctggaca tatagtga gtaaaaaagg agctcaggta caggactggt ctaagctgct caagattcag gagacagcca gtaacagag agctgagga aataatagcag atatactaa aacacttacc taaccttctg tggtaacaa ctccttaaag gggctggatg atgtgtgtgt cactttttat caccagcaa ggttaagata atgtatatag taaatattt gtaaccattt attaaataaa taaatattt agacagata acaagata ataaatgaac caataagaat gcaccatcta agtcaaaaata gccactttt tcttaacat tgtacctgct ttggctgctg cagaagcaa cttgttgga ttagacaaat caagctggtg atttaataaa ttccaatgta agtcttacc gtaattgta taactatcc agcactcacc atgaaagta aagaagcaac acagaaaaag ttcctaagt tcccaattt gaaatgatca gataacctat aaaagaacat attcatatta tactaacata aacacatata aatgcactta cagcagttac acagtattct cttcaataac tagtttctt atgcattat gtgtaataac agcaactaca atatttagat aattataaaa accaaggcaa taatttaaaa actgattaac cgttttactc taacttaagc atggattgga tcagtaagat tgattataaa atttgaatgc agtcagttg attgattcta atttaagtt ttaatttgt gtagaataa ttaagtga tatattgtc cagtgttcga gtgctcaaca gtgtgtttga aaaggaaaac aaagaatgtt ttgagaatgt gttaattcct taagacaatg gattttaatt ggtctgtgtg ttttcatatt tcttcattat cattatacat ctgtatgttg gacagaacac taactataaa tagtttttag aaagtgtttt ttgaagtatt ttaaatcata atatacatgac tgacttttga attcaaaat aggctgtgac tatacttctt cacttaggaa gagtgtgtgtg aaagccagac catctgtga ggtgctacag ttacatgtgg cctcagaat gcgtttggcc tgcctgtgtt tagcactctg ttggattacc	Homo sapiens
135	1925	Gonadotropin -Releasing Hormone Receptor	NM_000406	gagtttggg aggggtggtg gcagccagga ttcatctgag gagacccct tggctggtgg ctccctaga ttggtgaga gcccctctg aacctgtgtg ggaacccagc tagggctgga ctctggacc cagaggcgtc gctggacaa cagaactgtg acgcccagct gaggtggtg gcggtggagc caacagcagc ccccacctac cctgccttgt cctgggtgca gagtgagca gaggagtcca ttggcctcc tctccctgca cctgccttgt cctggaactg cgtgccagt tcccacgta tgtcggcacg ggcggtgagt ggggtggtg cctggaactg cctccacaa ctaagagctc aagtgtcac cgtg tccatgtgc atggaaatgt cctccacaa ctaagagctc aagtgtcac cgtg MPPCQPQRPL LLLLLLACQ PQVPSAQVMD FLFEKWKLYG DQCHNLSLL PPTELVCNR P TFDKYSCWPD TPANTANIS CPWYLPWHK VQHRFPKRC GPDGQWVRGP RGQWRDASQ QMDGEEIEV QKEVAKMYSS FQVMYTVGYS LSLGALLLAL AILGLSKLH CTRNAIHANL FASFVLKASS VLVIDGLLRT RYQKIGDDL SVSTWLSLSDG VAGCRVAADF MQYGIVANYC WLLVEGLYLH NLLGLATLPE RSFESLYLGI GWGAPMLFVV PWAVVKLFE NVQWTSNDN MGFWILRFP VELAILINEF IFVRIVQLLV AKLRAPQMHV TDYKFLAKS TLTLLPLLV HEVFAFVTD EHAQGLRSA KLFFDLFLSS FQGLIVAVLY CFLNKEVQSE LRRRWHRWRL GKVLWEERNT SNHRASSPG HGPPSKELQF GRGGGQDSS AETPLAGGLP RLAESEF ttggttgctg gtccacttac aaacactttt cataattgta tgtctttcca atggttatcc A tggtttgttc atttcaggca tatggccctg atcagattaa ctgacatgat gtatatgcaa agccttttga gttcttcaga aaataaatt atcttattca agactgattg cttataagga acttattata gctaataatag taggcacaa tttttttgta attctcctag atgagtcaga acttagtttt gatgtaggta aaaattttat ggtcacaaat ctgaggtgtg agaaaatctc tttccttgat actctatata aatagaggat ataaattttt caagctgtg agagagagga gaagctggta attctggaca tatagtga gtaaaaaagg agctcaggta caggactggt ctaagctgct caagattcag gagacagcca gtaacagag agctgagga aataatagcag atatactaa aacacttacc taaccttctg tggtaacaa ctccttaaag gggctggatg atgtgtgtgt cactttttat caccagcaa ggttaagata atgtatatag taaatattt gtaaccattt attaaataaa taaatattt agacagata acaagata ataaatgaac caataagaat gcaccatcta agtcaaaaata gccactttt tcttaacat tgtacctgct ttggctgctg cagaagcaa cttgttgga ttagacaaat caagctggtg atttaataaa ttccaatgta agtcttacc gtaattgta taactatcc agcactcacc atgaaagta aagaagcaac acagaaaaag ttcctaagt tcccaattt gaaatgatca gataacctat aaaagaacat attcatatta tactaacata aacacatata aatgcactta cagcagttac acagtattct cttcaataac tagtttctt atgcattat gtgtaataac agcaactaca atatttagat aattataaaa accaaggcaa taatttaaaa actgattaac cgttttactc taacttaagc atggattgga tcagtaagat tgattataaa atttgaatgc agtcagttg attgattcta atttaagtt ttaatttgt gtagaataa ttaagtga tatattgtc cagtgttcga gtgctcaaca gtgtgtttga aaaggaaaac aaagaatgtt ttgagaatgt gttaattcct taagacaatg gattttaatt ggtctgtgtg ttttcatatt tcttcattat cattatacat ctgtatgttg gacagaacac taactataaa tagtttttag aaagtgtttt ttgaagtatt ttaaatcata atatacatgac tgacttttga attcaaaat aggctgtgac tatacttctt cacttaggaa gagtgtgtgtg aaagccagac catctgtga ggtgctacag ttacatgtgg cctcagaat gcgtttggcc tgcctgtgtt tagcactctg ttggattacc	Homo sapiens

136	1925	Gonadotropin NP_000397.1 -Releasing Hormone Receptor	aatacacaaa acaagttaaac ctttgatctt tcacattaag tatctcaggg acaaaatttg acatacgtct aaacctgtga cgtttccatc taaagaaggc agaaataaaa catggacttt agattcgggt acaataaaat atcagatgca ccagagacac aaggcttgaa gctctgtcct gggaaaaat gcaaaacagt gctctcctg aacagatca aatcactgt tcagccatca acaacagcat cccatgatg cagggaacc tcccactct gacctgtct ggaagatcc gagtgcgggt tactttctc cttttctgc cttctcgac ctttaagtct tctttctgtg tgaacttca gaagtggaca cagaagaaa agaaaggaa aagctctca agaatgaagc tgctcttaaa acatctgacc ttagccaacc tgttgagac tctgattgtc atgccactgg atgggatgtg gaacattaca gtccaatggt atgctggaga gttactctgc aaagtctca gttatctaaa gcttttctc atgtatgcc cagccttcat gatggtggtg atcagcctgg accgctccct ggtatcacg aggccctag ctttgaaga ccaacagaaa gtcggacagt ccatggttg cctggcctgg atcctcagta gtgtctttgc aggaccacag ttatacatct tcaggatgat tcatctagca gacagctctg gacagacaaa agtttctct caatgtgtaa cacactgcag tttttcaca tgggtgcac agcatcttca taacttttct accttcagct gcctcttcat catcctctt ttcactatgc tgatctgcaa tgcaaaaaatc atcttcaccc tgacacgggt ccttcatcag gacccccag aactacaact gaatcagtc aagaacaata taccagagc acggctgaag actctaaaaa tgacggttgc atttgccact tcatttactg tctgctggac tccctactat gtccatgaaa tttggtattg gtttgatcct gaaatgttaa acaggttgct agaccacagta aatcacttct tctttctctt tgccctttta aacctatgt tgatccact tatctatgga tattttctc tgtga	Homo sapiens
137	1945	Opsin, green- sensitive	atggccccgc agtgagcct ccaaaggctc gcaggccgcc atccgcagga cagctatgag A gacagcacc agtcacagcat cttcacctac accaacagca atccaccag aggcccttc gaagcccgga attaccacat cgtccccaga tgggtgtacc acctcaccag tgtctggatg atctttgtgg tcatgcac cgttttca aatgggcttg accctggcgt cgtgacctg ttcaagaagc tgcgccacc gctgaactg atcctggta accctgtatgg ctactcgtg gcagagaccg tcatgccag cactatcag gttgtgaacc aggtctatgg gatcacaggt ctgggccacc ctatgtgtgt cctggaggc tacacgtct cctgtgtgg gatcacaggt ctctgtctc tggccatcat ttcctgggag agatggatgg tggctctgcaa gccctttggc aatgtagat ttgatgcaa gctggccatc gtgggcatg ccttctcctg gatctgggt gctgtgtgga cagccccgc catctttgt ttgagcaggt actggcccca cggcctgaag acttcatgcg gccagacgt gttcagcgc agctcgtacc cgggggtgca gcttacctg attgtctca tgggtcacctg ctgcacacc ccaatcagca tcatcgtgct ctgctacctc caagtgtggc tggccatccg agcgttgga aagcagcaga aagagtctga atccaccag aaggcagaga aggaagtgc gcgatggtg gtggtgatg tccctggcatt ctgcttctgc tggggaccat acgccttctt cgcattgctt gctgctgcca accctggcta ccccttccac	Homo sapiens

138 1945 Opsin, green-sensitive NP_000504.1 MAQWSLQRL AGRHPQDSYE DSTQSSIFTY TNSNSTRGPF EGPNYHIAPR WYVHLTSVMM P Homo sapiens

cctttgatgg ctgccctgcc ggctttcttt gccaaaagtg ccactatcta caaccctgtt
atctatgtct ttatgaaccg gcagttctga aactgcatct tgcagctttt cgggaagaag
gttgacgatg gctctgaact ctccagcgcc tccaaaacgg aggtctcatc tgtgtcctcg
gtatgcctg catga

139 1951 Growth Hormone Secretagogue Receptor NM_004122 atgtggaacg cgacgcccag cgaagagcgg gggttcaacc tcacactggc cgactggac A Homo sapiens

IFVVIASVFT NGLVLAATMK FKLRHPLNW ILVNLAVADL AETVIASTIS VNVQVGYFV
LGHPMCVLEG YTVSLCGITG LWSLAIISWE RWMVVKPFG NVRFDAKLAI VGIAFSWIWA
AVWTAPPIFG WSRYPHGLK TSCGPDVFSG SSYPGVQSYM IVLMTCCIT PLSIIVLCYL
QVWLAIKRAVA KQKSESTQ KAEKEVTRMV VMVLAFCFC WGPYAFFACF AAANPGYPFH
PLMAALPAFF AKSATIYNPV IYVFMNRQFR NCILQLFGKK VDDGSELSSA SKTEVSSVSS
VSPA

tgggatgctt ccccggaacg cgactcgctg ggcgacgagc tgcctgagct tctccccgcg
ccgctgctgg cggcgctcac agccacctgc gtggcactct tctgtgtggg tategctggc
aacctgctca ccatgctggt ggtgtcgccg ttccgcgagc tgcgcaccac caccacacctc
tacctgtcca gcatggcctt ctccgatctg ctcatcttcc tctgcatgcc cctggacctc
gttcgctctt ggcagtaccg gccctgggac ttccgagacc tctctgcaa actcttccaa
ttcgtcagtg agagctgcac ctacgccag gtgctaccca tcacagcgt gagcgtcgag
cgctacttcg ccatctgctt cccactccgg gccaaagtgg tggtcaccaa gggcggggtg
aagctgggtca tcttcgtcat ctgggcccgt gccctctgca gcgcggggcc catcttcgtg
ctagtcgggg tggagcacga gaacggcacc gacctgtggg acaccaacga gtgccgcccc
accagatttg cgggtgcgtc tggactgctc acggtcatgg tgtgggtgtc cagcatcttc
ttcttctctc ctgtcttctg tctcacggtc ctctacagtc tcatcggcag gaagctgtgg
cggagaggcg cggcgcatgc tgtcgtgggt gcctcgctca gggaccagaa ccacaagcaa
accgtgaaaa tgcgggtgg gtctcagcgc gcgctcaggc ttctctcgc ggtctctatc
ctctccctgt gccttctccc ttctctctga

140 1951 Growth Hormone Secretagogue Receptor NP_004113.1 MNWATPSEEP GENLTADLD WDASPGNDSL GDELLQLFPA PLLAGVTATC VALFVVGIAG P Homo sapiens

LLTMLVVSFR FRELRITTNL YLSSMAFSDL ILFLCMLDL VRLWQYRPWN FGDLLCKLFQ
FVSECTYAT VLTITALSVE RYFAICFPLR AKVVVTKGRV KLIVFVIWAV AFCSAGPIFV
LVGVEHNGT DPWDTNECRP TEFAVRSGLL TMVMVSSIF FFLPVFCLTV LYSLIGRKLW
RRRRGDVVG ASLRDQNHQ TVKMLGGSQR ALRLSLAGPI LSLCLLPSL

141 1954 Growth Hormone-Releasing Hormone Receptor NM_000823 agcagccaag gcttactgag cttgtggag ggagccactg ctgggctcac catggaccgc A Homo sapiens

cgatgtggg gggcccacgt ctctgctggt ttgagcccgt taccgacctg attgggccac
atgcacccag aatgtgactt catcacccag ctgagagagg atgagagtgc ctgtctacaa
gcageagagg agatgcccaa caccacctg ggtgcccgt gcacctggga tgggctgctg
tgctggccaa cggcaggctc tggcagatgg gtcacctcc cctgcccga ttcttctct
cactcagct cagagtcagg ggctgtgaa cgggattgta ctatcactgg ctggtctgag
cccttccac cttaacctgt ggctgcccct gtgcccctgg agctgctggc tgaggaggaa
tcttacttct ccacagtga gattatctac accgtgggccc atagcatctc tattgtagcc
ctcttctgtg ccatcaccat cctgggtgtc ctccaggagg tccactgccc ccggaactac
gtccacacc agctgttcac cacttttatc ctcaaggcgg gactgtgtt cctgaaggat

142	1954	Growth Hormone- Releasing Hormone Receptor	NP_000814.1	<p>gctgcccctt tccacagcga cgacactgac cactgcagct tctccactgt tctatgcaag gtctctgtg cgcctccca ttctgccacc atgaccaact tcagctggct gttggcagaa gccgtctacc tgaactgcct cctggcctcc acctcccca gctcaaggag agccttctgg tggtggttc tgcgtggctg gggcctgccc gtctctctca ctggcacgtg ggtgagctgc aaactggcct tcgaggacat cgcgtgctgg gacctggacg acacctcccc ctactggtgg atcatcaaa ggcacattgt cctctcggtc ggggtgaact ttgggctttt tctcaatatt atccgcatcc tggtaggaa actggagcca gctcagggca gcctccatac ccagctccag tattggcgtc tctcaagtc gacacttttc ctgataccac tctttggaat tcaactacatc atcttcaact tctgcccaga caatgctggc ctgggcatcc gcctccccct ggagctggga ctgggttccct tccagggtctt cattgttgcc atctctact gcttccctca ccaagaggtg aggactgaga tctcacggaa gtggcatggc catgaccctg agcttctgcc agcctggagg accgtgcta agtgaccac gccttcccgc tcggcggaat aggtgctgac atctatgtgc taggtgctct catcacgcca ctggagtcca cacttgaatt tgggcagta ccacgggtct gccatgctct ggaggagcaa gggggccaca tcccacccc agctgttacc cagcccgggg caggtgcagc ccttccctcc ttctctgga ctgactctc ttttgaggtc cctgtatgtc tacctctgac ttctgtggtc cctctgtgac tgctctcatc cattctctct actggggcct gggctctag cccaaggctc agaggagcca ataaacctgt aaatgaaaaa aaaaaa MDRRMWGAHV FCVLSPLPTV LGHMPECDF ITQLREDESA CLQAAEEMPN TTLGCPATWD P GLLCWPTAGS GEWTLPCPD FFSHFSESG AVKRDCITIG WSEFPFPYPV ACPVPLELLA EEESYFSTVK IIVTVGHSIS IVALFVAITI LVALRRHLCP RNYVHTQLFT TFILKAGRVE LKDAALFHS DTDHCSFSTV LCKVSVAAASH FATMDFNSWL LAEAVYLNCL LASTSPSSRR AFWWLVLAGW GLPVLFTGW VSCKLAFEDI ACWLDLDTSP YWIIKGPV LSVGVNFGFL LNIIIRILVRK LEPAQGSLSHT QSQYWRLSKS TLFLIPFEGI YYIIFNPLPD NAGLGIRLPL ELGLGSFQGF IVAILYCFIN QEVRTSIRK WHGHDPPELLP AWRTRAKWTT PSRSAKVLT SMC</p>	Homo sapiens
143	2120	Histamine H1 Receptor	NM_000861	<p>caggagaca tacaggattt aagaagccca tcatggagaa gaccttcaat tacagagata A aaaagtthtt ctgttggaac aagttaaac tagatggcag ataacagact gaggagtgag ctgcttctga ctgatataa aaggagatga gccataactg gcgctgctc ttctgccaat gagcctcccc aattctcct cctctctaga agacaagatg agcactatct gcttggtcac tatggccagc cccagctga tgcccctggt ggtggtcctg agcactatct gcttggtcac agtagggctc aacctgctg tgctgtatgc cgtacggagt gagcggaaag tccacactgt ggggaacctg tacatgltca gcctctcggt ggcggacttg atcgtgggtg ccgtcgtcat gcctatgaac atctctacc tgctcatgtc caagtgttca cgtggccgct cctctgctc cttttggctt tccatggact atgtggccag cacagcgtcc attttcagt tcttcatcct gtgcattgat cgtaccgct ctgtccagca gcccctcagg taccttaagt atcgtaccaa gaccgagcc tcggccacca ttctgggggc ctggtttctc tcttttctgt gggttattcc cattctaggc tggaaatcact tcatgcagca gacctgggtg gcgcgagagg acaagtgtga gacagacttc tatgatgtca cctgggttcaa ggtcatgact gccatcatca acttctacct gcccaccttg ctcatgctct ggttctatgc caagatctac aaggccgtac gacaacactg ccagcaccgg gagtcatca ataggtccct cccttccctc tcagaaatga agctgaggcc agagaacccc aagggggatg ccaagaacc agggagaggag tctccctggg aggttctgaa</p>	Homo sapiens

aaggaaagcca aaagatgctg gtggtggatc tgtcttgaag tcaccatccc aaacccccaa
ggagatgaaa tccccagtgg tcttcagcca agagatgatg agagaagttag acaaaactcta
ctgctttcca ctgatattg tgcacatgca ggctgcggca gagggagta gcagggacta
tgtagccgtc aacggagcc atggccagct caagacagat gagcagggcc tgaacacaca
tggggccagc gagatatcag aggatcagat gttaggtgat agccaatcct tctctgaaac
ggactcagat accaccacag agacagcacc aggcaaaagg aaattgagga gtgggtctaa
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tgtatctggg ttgcacatga accgcgaaag gaaggccgcc aaacagttgg gttttatcat
ggagcccttc atctctgct ggatccctta ttcatcttcc ttcatggtca ttgccttctg
caagaactgt tgcaatgaac atttgacat gttcacatc ttgctgggct acatcaactc
cacactgaac cccctcatct acccttctg caatgagaac ttcaagaaga cattcaagag
aattctgcat attcgctcct aaggaggct ctgaggggat gcaacaaaat gatccttatg
atgtccaaca aggaatatga ggacgaaggc ctgtgtgttg ccaggcaggc acctgggctt
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tttgcaagaa agtcagacct gtttcttga actgggttca aaaagaaaa aataataaaa
ataaaagaga gagagaatca gacctgggtg gaactctct gctcctcagg aactatggga
gcctcagact catgttaatt caagcttcc gagtcaagt attgacaact gaagagacac
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cctctttaac agcttctcc agaaccagt tctgaaccac cctggaaaatt ctgccttat
attcttact caaacatgtt tagagtggat agaaaattat gcagcttgca caccatcat
ctttaacccc aaatttctt tggctattaa aaagtgggt gcaaaaggca tctcaaaaag
aaagagaaat gaaatattt tgaatggtt cagcttaaaa attaaaagaa ggaatggggg
cagaatgcca tattttgag ggctgtacta ggtttatctc atttaagccc cacaacacc
cacaggaggg taatttcta actctagtt gcagaggagc aaattgaggt tcagcaaggt
gagagaggta cccaaggta catagctagt tatgtgagaa agttagagta cagatcctct
ggggtttcag cttatgtag catatttct ccgaaaggca aaaatgtgcc cttttggccg
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tgaggccagg agttcaagac cagctggcc aatatgaga aacctgtct ctaactaaaa
cacaataat atctggcat ggtagggcat gcctgtgtc ccacttactt gggaggccga
ggcacgagaa tgccttgaac ccgggaggtg gaggttgcg tgagccaaga tcacgccact
gcactccagc ctgggcaaca gagcaagact ctgtctcaaa aaaaaaata caatatttta
acaaatgtcc ctcttaagt tgacagata cacatacag gtattcccaa ggtggtggc
agctcaaaat gatagtgtg agtagcgaa cagctgacat ggagttcccg tgcacctacg
gaaggggacg tttgaaagg accaagtga ttttatctg tgagtctgt tgtgtttgtc
aaaaagtcac tgtaatctt catagccata cctgtaagc aaaaactagt aaagacatag
gaacatgtag ttttacttg tgtttatgtt gcaactctgt tgtgatttat attttaaagc
ttggtgctaa accacaatat gtatagcaca tggagtgcct gtacaagctg atgttttga
tttgtgttc ctcttgcac gatctgtcaa agtgagatat ttttacctgc ctaaaatatg

Homo
sapiens

P

2120 Histamine H1 NP_000852.1
Receptor

144

atgtttaaaa gcataactcta tgtgatttat ttattttctac cttttctgagt cttttggact
aagaagatgt tttgaaatgt accatcaaat gtttaacagag tttgatatgg gctttctctt
tggtttctca tcacatttgt aatgtctttt taaaaggatg taactttttg taaaaagctt
cattctcact ctgctttgca tcccccaaac tcttctgttca aaacgggggg agtttaggag
actttaatcc cggtttcaga agctgcagct ggtctgtttc caggtcagaa accattgttc
agaagacctc cctgtgagag agttgctcct cagggtccct caggaccaa gaacactcga
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caactagtg agagaactga ttgtgagctc
MSLPNSSCLL EDKCEGNKT TMASPOLMPL VVVLSTICLV TVGLNLLVLY AVRSERKLHT
VGNLYIVSLV VADLIVGAV MPMNIIYLIM SKWSLGRPLC LFWLSMDYVA STASIFSVEI
LCIDRYRSVQ QPLRYLKVRT KTRASATILG AWFLSFLWVI PILGNHFMQ QTSVRREDKC
ETDFYDVTWF KVTALINFY LPTLLMLWFY AKIYKAVRQH CQRELINRS LPSFSEIKLR
PENPKGDAAK PKESPWEVL KRPKDAGGG SVLKSPSQTP KEMKSPVFS QEDDREVDKL
YCFPLDIVHM QAAAEGRSD YVAVNRSHGQ LKTDEQGLNT HGASEISEDQ MLGDSQSFSR
TSDTTTETA PGKGLRSGS NTGLDYIKFT WKRLRSHSRQ YVSGLHMNRE RKAQKQLGFI
MAAFILCWIP YFIFFMVI AF CKNCCNEHLH MFTIWLGYIN STLNPLIYPL CNENFKKTFK
RILHRS

Homo
sapiens

A

2121 Histamine H2 NM_022304
Receptor

145

ctcctgccc ccaactgactc cagagagggg gatccccagt acttgactcc atcacgcaga
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tgctgggttc cctacttcac cgcgtttgtg taccgtgggc tgagagggga tgatgccatc
aatgaggtgt tagaagccat cgttctgttg cttgggtatg ccaactcagc cctgaacccc
atcctgtatg ctgcgctgaa cagagacttc cgcacccgggt accaacagct cttctgtgc

146	2121	Histamine H2 Receptor	NP_071640.1	aggtggcca accgaaact ccacaaact tctctaggt ccaacgcctc tcagctgtcc aggacccaaa gcgagaacc caggcaacag gaagaaaaa ccctgaagct ccaggtgtgg agtgggacag aagtcacggc cccccaggga gccacagaca ggtaatagacc ctgacattg gtcacagga tgggggcaat ggaggggat gctactgat ggaatgatta agggagctgc tgttaggtg gtctgtgtt atgttctagg aactctcat gagcactttg taaacacct ctgtctaat cctcccaag gcccccaag gtagaacta gctccctttt aaaaggagca cattaaaatt ctacagggac ttggcaagg cgcacagct ggggcat MAPNGTASSF CLDSTACKIT ITWLVAVLIL ITVAGNVVVC LAVGLNRRRL NLNCFIVSL P AITDLLLGLL VLPFAIYQL SKWSFGKF CNIYSLDM LCTASILNLF MISLDRYCAV MDPLRYPLV TPVRVAISLV LIWVISITLS FLSIHLGWS RNETSIGNHT TSKCKVQVNE VYGLVDGLVT FYLPLLIMCI TYRIFKVAR DQAKRINHIS SWKAATIREH KATVTLAAM GAFIICWFPY FTAFFVYRGLR GDDAINEVLE AIVLWLYAN SALNPILYAA LNRDFTGYQ QLFCCRLANR NSHKTSLRSN ASQLSRTQSR EPRQEEKPL KIQWMSGTEV TAPQGTDR	Homo sapiens
147	2783	Opioid Receptor, kappa 1 (OPRK1)	NM_000912	tgcagcactc accatggaat ccccgattca gatctccgc ggggagcctg gccctacctg A cgccccgagc gctgctctgc ccccaacag cagcgcctgg ttccccggct gggccgagcc cgacagcaac ggcagcgccg gctcgaggga cgcgagctg gagcccgcg acatctcccc ggccatcccc gtcacatca cggcggtcta ctccgtagt ttctgtctgg gcttgggtgg caactcgctg gtcagtctg tgatcatccg atacacaaag atgaagacag caaccaacat ttacatattt aacctggctt tggcagatgc tttagttaact. acaaccatgc cctttcagag tacggtctac ttgatgaatt cctggccttt tggggatbgtg ctgtgcaaga tagtaatttc cattgattac tacaacatgt tcaccagcat accatgatga cgttggagccg ctacattgcc gtgtgccacc ccgtgaaggc tttagacttc cgcacaccct tgaaggcaaa gatcatcaat atctgcatct ggctgctgc gtcactctgt ggcactctctg caatagctct tggaggcacc aaagtcaggg aagacgtcga tgtcatbtag tgtcccttgc agtccccaga tgatgactac tctgtgtggg acctcttcat gaagatctgc gtcttcatct ttgctctctg gatccctgct ctcacatca tctgtctgcta caccctgatg atcctgcgtc tcaagagcgt ccggctcctt tctggctccc gagagaaaga tcgcaacctg cgtaggatca ccagactggt cctgtgtgtg gtggcggttt tctgtctctg ctggactccc attcacatat tcatcctggt ggaggtctg gggagcaact cccacagcac agctgctctc tccagctatt acttctgcat cgcttaggc tataccaaca gtacgtgaa tccattctc tacgcttttc ttgatgaaaa cttcaagcgg tgtttccggg acttctgctt tccactgaag atgaggtgg agcggcagag cactagcaga gtcgaaata cagttcagga tccgtcttac ctgagggaca tctgagggat gaataaaacca gtatgactag tctgtggagat gtcttcgtac ag MESPIQIFRG EPGPTCAPSA CLPPNSSAWF PGWAEPSNG SAGSEDAQLE PAHISPAIPV P IITAVYSVVF VVGLVNSLV MFVIIRYTKM KTATNIYIFN LALADALVTT TMPFQSTVYL MNSWPFQDVL CKIVISIDY NMFTSIFLT MMSVDRIYAV CHPVKALDFR TPLKAKIINI CIWLLSSVG ISAILVGGTK VREDVDVIEC SLQFPDDDDYS WWDLFMKICV FIFAFVIPVL IIIVCYTLM IRLKSVRLLS GSREKDRNLR RITRLVLVV AVFVVCWTPI HIFILVEALG STSHSTAALS SYFICIALGY TNSSLNPILY AFLDENFKRC FRDFCFPLKM RMERQSTSRV RNTVQDPAYL RDIDGMNKEV	Homo sapiens
148	2783	Opioid Receptor, kappa 1 (OPRK1)	NP_000903.1	ggtgagcacc aaagtcaggg aagacgtcga tgtcatbtag tgtcccttgc agtccccaga tgatgactac tctgtgtggg acctcttcat gaagatctgc gtcttcatct ttgctctctg gatccctgct ctcacatca tctgtctgcta caccctgatg atcctgcgtc tcaagagcgt ccggctcctt tctggctccc gagagaaaga tcgcaacctg cgtaggatca ccagactggt cctgtgtgtg gtggcggttt tctgtctctg ctggactccc attcacatat tcatcctggt ggaggtctg gggagcaact cccacagcac agctgctctc tccagctatt acttctgcat cgcttaggc tataccaaca gtacgtgaa tccattctc tacgcttttc ttgatgaaaa cttcaagcgg tgtttccggg acttctgctt tccactgaag atgaggtgg agcggcagag cactagcaga gtcgaaata cagttcagga tccgtcttac ctgagggaca tctgagggat gaataaaacca gtatgactag tctgtggagat gtcttcgtac ag MESPIQIFRG EPGPTCAPSA CLPPNSSAWF PGWAEPSNG SAGSEDAQLE PAHISPAIPV P IITAVYSVVF VVGLVNSLV MFVIIRYTKM KTATNIYIFN LALADALVTT TMPFQSTVYL MNSWPFQDVL CKIVISIDY NMFTSIFLT MMSVDRIYAV CHPVKALDFR TPLKAKIINI CIWLLSSVG ISAILVGGTK VREDVDVIEC SLQFPDDDDYS WWDLFMKICV FIFAFVIPVL IIIVCYTLM IRLKSVRLLS GSREKDRNLR RITRLVLVV AVFVVCWTPI HIFILVEALG STSHSTAALS SYFICIALGY TNSSLNPILY AFLDENFKRC FRDFCFPLKM RMERQSTSRV RNTVQDPAYL RDIDGMNKEV	Homo sapiens
149	2964	Luteinizing	NM_000233	ggtgagcacc aaagtcaggg aagacgtcga tgtcatbtag tgtcccttgc agtccccaga tgatgactac tctgtgtggg acctcttcat gaagatctgc gtcttcatct ttgctctctg gatccctgct ctcacatca tctgtctgcta caccctgatg atcctgcgtc tcaagagcgt ccggctcctt tctggctccc gagagaaaga tcgcaacctg cgtaggatca ccagactggt cctgtgtgtg gtggcggttt tctgtctctg ctggactccc attcacatat tcatcctggt ggaggtctg gggagcaact cccacagcac agctgctctc tccagctatt acttctgcat cgcttaggc tataccaaca gtacgtgaa tccattctc tacgcttttc ttgatgaaaa cttcaagcgg tgtttccggg acttctgctt tccactgaag atgaggtgg agcggcagag cactagcaga gtcgaaata cagttcagga tccgtcttac ctgagggaca tctgagggat gaataaaacca gtatgactag tctgtggagat gtcttcgtac ag MESPIQIFRG EPGPTCAPSA CLPPNSSAWF PGWAEPSNG SAGSEDAQLE PAHISPAIPV P IITAVYSVVF VVGLVNSLV MFVIIRYTKM KTATNIYIFN LALADALVTT TMPFQSTVYL MNSWPFQDVL CKIVISIDY NMFTSIFLT MMSVDRIYAV CHPVKALDFR TPLKAKIINI CIWLLSSVG ISAILVGGTK VREDVDVIEC SLQFPDDDDYS WWDLFMKICV FIFAFVIPVL IIIVCYTLM IRLKSVRLLS GSREKDRNLR RITRLVLVV AVFVVCWTPI HIFILVEALG STSHSTAALS SYFICIALGY TNSSLNPILY AFLDENFKRC FRDFCFPLKM RMERQSTSRV RNTVQDPAYL RDIDGMNKEV	Homo sapiens

Hormone/Chor
iogonadotrop
in Receptor

sapiens

agccgcgcgt gccacgagcg ctgcgcgagg cgctctgccc tgagccctgc aactgcgtgc
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ataacagatc agaaatttaa aataaggggc tttttcttca ggtagtttga aaaaacact

150 2964 Luteinizing NP_000224.1 Homo sapiens
Hormone/Chor
iogonadotrop
in Receptor

ctagagatgc actgttcaat tcggtacgca ctagccacat gtggctaaat taaaattaaa
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151 2976 Lysophosphat NM_001401 Homo sapiens
idic Acid
Receptor
Edg2

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QTKGQYNNHA IDWQTGSGCS TAGFETVEAS ELSVYTLTVI TLERWHTITY AIHLDQKLRL
RHAAILMLGG WLFSSLIAML PLVGVSNNMK VSICFFPMDVE TTLSQVYILT ILILNVVAFF
IICACYIKIY FAVRNPELMA TNKDTKIACK MAILFTDFT CMAPISEFAI SAAFKVPLIT
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SNCKNGFTGS NKPSQSTLKL STLHCQGTAL LDKTRYTEC

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152	2976	Lysophosphat NP_001392.1 idic Acid Receptor Edg2	gcatgaacc ccatacatta ctctaccgc gacaaagaaa tgagcgccac ctttaggcag atcctctgct gccagcgag tgagaacccc accggcccca cagaaggctc agaccgctcg gtctctctcc tcaaccacac catcttggtc ggagttgaca gcaatgacca ctctgtggtt tagaacggaa actgagatga ggaaccagcc gtctctctct ggagataaaa cagcctccc ctacccaatt gccagggcaa ggtgggggtg agagagggag aaaaagtcaac tcatgtactt aaacactaac caatgacagt attgtgtcct ggacccacca agacttgata tatattgaaa attagcttat gtgacaaccc tcactctgat ccccatccct tctgaaagta ggaagttgga gctcttgcaa tggaaattcaa gaacagactc tggagtgtcc atttagacta cactaactag acttttaaaa gatctgtgtg ggtttgtgac aagtgcagaat aaattctggc tagttgaatc cacaacttca ttatatata ggcttccctt ttttattttt aaaggataacg tttcacttaa taaacacgtt tatgctatc agcatgtttg tgatgatga gactatggac tgctttttaa ctaccataat tccatttttt cctttacata ggaactgtt aagttggaat tatctttgt ttagaaagca tgcattgtaat gtatgtatgc agtatgcctt aaagccagta tttgtttagg tactaatgtt aaatcttcta ggaatataga cctagacttc aactaaaaag attaaaaagga tcatgaagca acaaatgctc taatcacaaat attaaactgt taattaaaaat gttgtaacaa gtataaaaca ggaatgttaa gtttattacc aaagtgtat gtattccaaa aaagtcatag aagatgaagc actataatat tgttcccata tattaaaaat acccaagtac attctaatta ccagtatatc agaggaaaat tttcgtatgc ataaaaaagc aaaaatgatt actgataata tcacaaaccca cttgaaaaat gcagaaatgt ataaaaaagc aaaaatgatt actgataata tcacaaaccca gaagtaacca ccttataaaa cgaaccccca tgtatgccta tatgtgtatt gtatactttt tttacataat tggagtacata ctgtaaacag tttataagt agatcttttt cattgcaaaa ttgccacatt ttcttatggc attaaaaaatt ttacaaaaac ataattttaa tggctatatt atattccatt taatggatgc aactcagttt atttaacccat tcccattgtt ttaactattt aggttggttc taattttcat tattataaag ttgcagaaat ttggtgt	Homo sapiens
153	3038	G Protein- Coupled Receptor MRG	ttttgtatt gttgcaccct aagtcgttc atttcttct cctcagctga cattggagc A atagcagtcg atgatgccc cagagacact gcctgagact cagccccctg gaaaaacgca gatttcctta tttccaggt caagtcctgc cagccataga aaggacttct ttggtgcca ctgctgtgaa atgcctgctc tggaaatctc agtgcctcct tgtacctgtc tgagccagg gaaatgccat actgtggcac tgcctgcatc ttgtatggcta cccaaggatg cccaggactg gtttgaaaga gatgagacat gccagggtgc ttggtctcac cttgtaatcc agcactttgg gaggtcaagg cagtggatca caaggtcaga gttgagacca gccaggccaa tatggtgaaa acccatctc tactaaaaat acaaaaaat agccgggcaa tgggtgtggg tgctgtagt tccagctagt caggaggccg aggcaggaga atcgcttgaa cctgggaaggt ggaggttcca gtgagctgag atcgcgccac tgcactccag cctgggtgac agagtgagac tccaactcaa	Homo sapiens

154	3038	G Protein- Coupled Receptor MRG	AAB21255.1	<p> aaaaaaaaa aaaaaagaga tgagacacta gtgtctcatg agtagaacct ggaccagaca caaatctcca ttccaatgt ttagtgctc tttagtccc agtagaacct tttaggtctt atgtgggtag gcctggggga tcctgtacaa caggagatgt gtaggggag ggagaacaga tcacaaatc atggagagct atttgacag cagatactcc catccactct gatagttagt taatgttcag ctgttccctaa aaagcacacc caacaatggg tgttctattc cagcctagga aaatgtagag gcaagggggtc tgaggccaga ggacaccact agatggacca ctgctcctga ctgtgatgtt gtggcccaat caggtcccaag caccocatgg tctgggggaa aatttgcctg ttcagccaga gggctggatg gacagtgttt gctgagtcac agatatctct ctcagttagc cttctctcc acagtgtga ccaggaggca cagaacccaa acctgggtatc tcagctctgt ggcgtctttc ttcaaaatga gacgaatgaa accatacata tgcagatgag catggcagt ggacagcagg cctgcccctt gaatatcatt gcccacaagg ctgtgctggt ctcctctgt gggtctttat tgaatggcac tgtcttctgg ctgctttgct gtggggccac gaatccctac atggtataca tccctcacct ggtcgtgct gacgtgatct atctttgctg ctggcagtg gggtctttac aggtgactct gctaaactat catggagtctg tgtttttat cctgatttc ctggccatat tgtctccctt ctcctttgag gtgtgtctct gtctcctggt ggcctcagc acagagcgggt gtgtgtgtgt cctcttccc atctgttaca gatgccaccg cccaaaaatc acatctaata gtgtctgcac cctcatctgg ggcctgctt tttgcatcaa catagtaaaa tcacttttc taacttactg gaaacatgta aaggcactgt tcatattctt aaagctttct gggtctttcc atgtctatct ttcacttgtg atgtgtgtgt ctagtctgac tctactcatt agattcctgt gctgctccca gcagcaaaa gcccacagg tctatgcggt ggtgcagatc tcggccccc tgttctact ctggcccta cctctattta attctctgt tccctattat aaacagcagc ttcaaaatgt tgtcaccac cctctattta attctctgt tccctattat aaacagcagc gccaacccta tcatattt cttgtgggg agcctcagaa agaaaaggct gaaggaaatc ctcagagtga ttctccaaag ggcgttagca gataagccag aggtggggag gaacaaaaag gcagctggca tcgaaccaa gcagcaacca cactctactc agcatgtgga gaacctctt cccagggagc acagggtcga tgtggaaca taatttccca catctgagct ggggaattgt acacatagta accagcctg ttctgcatca taaggctgct gcatcaaatc aatgctttat tctaatacag ttcagctttc atggactttc aaacacaccc ctgtctgttt gtggttgga gagacattaa cttccttctt aggcagtaag ccagttttga atgtgtcca gttcccaacga tgaggggaaat gggaccagat gagactttcc tggtagctgt ggaatccaaa taaagaccat acaaaggcat gaattc </p>	Homo sapiens
155	3057	Melanocortin 3 Receptor (MC3R)	NM_019888	<p> atgagcatcc aaaaagata tctggaggga gattttgtct tctctgtgag cagcagcagc A ttctacgga cctgtctgga gcccagctc ggatcagccc ttctgacagc aatgaatgct tcgtgctgcc tgcctctgt tgcctcctgt tgcctcctgt tgcctcctgt tgcctcctgt </p>	Homo sapiens

156	3057	Melanocortin NP_063941.1 3 Receptor (MC3R)	<p>cctttttca gcaaccagag cagcagcgcc ttctgtgagc aggtcttcat caagcccgag atcttctgt ctctgggcat cgtcagtcgt ctggaataca tcctggttat cctggccgtg gtcaggaacg gcaacctgca ctcccagatg tacttttttc ttgtagcctt ggcggtggcc gacatgctgg taagtgtgc caatgcctg gagaccatca tgatcgccat cgtccacagc gactacctga ccttcgagga ccagtttacc cagcacatgg acaacatctt cgaactccatg atctgcatct ccctgggtgg ctccatctgc aacctcctgg ccatcgccgt cgacaggtag gtcaccatct tttagcgctt ccgctaccac agcatcatga ccgtgaggaa ggcctccacc ttgatcgtgg ccatctgggt ctgctgcggc gtctgtggcg ttggtgttcat cgtctactcg gagagcaaaa tggtcattgt gtgctctatc acctgtttct tcgcatatgat gctcctcatg ggcaccctct acgtgcacat gttcctcttt ggcggggtgc acgtcaagcg catagcagca ctgccacctg ccgacgggggt ggcacacag caacactcat gcatgaagg ggcagtcacc atcacattc tcctgggctg gttcatcttc tgcctggccc ccttcttctt ccacctggctc ctcatcatca cctgccccac caacctctac tgcactgtct acactgccc cttcaaacacc tacctgggtc tcactcatgt caactccgtc atcgaccac tcactctacg ttcccgagc ctggaattgc gcaaacctt tagggagatt ctctgtggct gcaacggcat gaacttggga tag</p>	Homo sapiens
157	3058	Melanocortin NP_005912 4 Receptor (MC4R)	<p>MSIQKKYLEG DFVFPVSSSS FLRTLLEPQL GSALLTAMNA SCCLPSVQPT LPNGSEHLQA P PFFSNQSSSA FCEQVFIKPE IFLSLGIVSL LENILVILAV VRGNLHSPM YFFLCSLAVA DMLVSVSNAL ETIMIAIVHS DYLTFFEDQFI QHMNDIFDSM ISLSIVASIC NLLAIAVDYR VTIFYALRYH SIMTVRKALT LIVAIWVCCG VCGMVIVCLT TMFFAMLLIM GTLVHMELEF ARLHVKRIAA LPPADGVAPO QHSCMKGAVT ITILGVFIF CWAPFFHLV LIITCPTNPY CICYTAHENT YLVLMCNVS IDPLIYAFRS LELRNTFREI LCGCNGMNLG</p>	Homo sapiens
158	3058	Melanocortin NP_005903.1 4 Receptor	<p>attgataatg tcatgactc ggtgatctgt agtctctgc acctctggaa ccgcagcagt A taccagactgc acagcaatgc cagttagtcc ctggaaaaag gctactctga tggaggggtgc tacgagcaac tttttgtctc tcctgaggtg ttgtgactc tgggtgtcat cagcttgttg gagaatatct tagtgattgt ggcaatagcc aagaacaaga atctgcattc acctatgtac tttttcatct gcagcttggc tgtggctgat atgctgtga gcgtttcaaa tggatcagaa accattatca tcacctatt aaacagtaca gatacggatg cacagagttt cacagtgaat attgataatg tcatgactc ggtgatctgt agtctctgc ttgcatccat ttgcagcctg ctttcaatg cagtggacag gtactttact atctctatg ctctccagta ccataacatt atgacagtta agcgggttgg gatcatcata agttgtatct gggcagcttg cacggtttca ggcattttgt tcatcattta ctcatagatg agtgcgtga tcactgcct catcaccatg ttcttcacca tgctggctct catggcttct ctctatgtcc acatgttct gatggccagg cttcacatta agaggattgc tgtctctccc ggcaactggg ccatccgcca aggtgccaat atgaaggag cgttacctt gaccatctg atggcgctct ttgtgtctg ctgggccccca ttcttctcc acttaattt ctacatctct tgcctcaga atccatattg tgtgtgcttc atgtctcact ttaacttga tctcactg atcatgtga attcaatcat cgtacctctg atttatgcac tccggagtca agaactgag aaaaacctta aagagatcat ctgttgcctat ccctgggag gcctttgtga cttgtctagc agatattaa</p>	Homo sapiens

(MC4R)

159 3059 Melanocortin NM_005913
5 Receptor
(MC5R)

IDNVIDSVIC SLLASICSIL LSIADVRYFT IFYALQYHNI MTVKRVGIIL SCIWAACVTS
GILFIISDS SAVIICLITM FFTMLALMAS LYVHMFMLAR LHIKRIAVLP GTGAIRQGAN
MKGAITLIL IGVFVVCWAP FFLHLIFYIS CPQNPYCVCF MSHFNLYLIL IMCNSIIDPL
IYALRSQELR KTFKEICCY PLGGLCDLSS RY
atgaattcct catttcacct gcatttcttg gatctcaacc tgaatgccac agaggggcaac A
ctttcaggac ccaatgtcaa aaacaagtct tcaccatgtg aagacatggg cattgctgtg
gaggtgttc tcaactctggg tgtcatcagc acatcttgga acatcttggt cataggggccc
atagtgaaga acaaaaacct gcactcccc atgtacttct tctgtgtagc cctggcagtg
gcggacatgc tggtagagcat gtccagtggc tgggagacca tcaccatcta cctactcaac
aacaagcacc tagtgatagc agagcccttt gtgcgcaca ttgacaatgt gttgactcc
atgatctgca ttccgtggt ggcattccatg tgcagcttac tggccattgc agtggatagg
tacgtcacca tctctacgc cctgcgctac caccacatca tgacggcgag gcgtcaggg
gccatcatcg ccggcatctg ggccttctgc acgggctgagc gcattgtctt catcctgtac
tcagaatcca cctacgtcat cctgtgcttc atctcatgt tcttcgctat gctgttcttc
ctggtgtctc tgtacatata catgttcttc ctggcgcgga ctacagtcaa gcggatcgcg
gctctgccc gggccagctc tgcggcgagc aggaccagca tgcaggggcg ggtaccgctc
accatgctgc tggcgctgtt taccgtgtgc tgggccccgt tcttcttca tctcacttta
atgctttctt gccctcagaa cctctactgc tctcgttca tgtctcactt caatatgtac
ctcatactca tcatgtgtaa ttccgtgatg gacctctca tatatgcctt ccgcagccaa
gagatgcgga agacctttaa ggagattatt tgcgtccgtg gtttcaggat cgctgcagc
ttccccagaa gggattaa

Homo
sapiens

160 3059 Melanocortin NP_005904.1
5 Receptor
(MC5R)

IVNKNLHSP MYFFVCSLAV ADMLVSMSSA WETITTYLLN NKHLVIADAF VRHIDNVFDS
MICISVVASM CSLLAIAVDR YVTIFYALRY HHIMTARRSG AIIAGIWAFC TGCIVIFILY
SESTYIILCL ISMFFAMFL LVSLEYHML LARTHVKRIA ALPGASSARQ RTSMQGAFTV
TMLLGVFTVC WAPFFLHLTL MLSCPQLYC SRFMSHFNMV LILIMCNSVM DPLIYAFRSQ
EMRKTKEII CCRGFRIACS FPRRD

Homo
sapiens

161 3061 Melanocortin NM_002386
1 Receptor
(MC1R)

ggagagggtg tgagggcaga tctgggggtg ccagatgga aggaggcagg catgggggac A
acccaaggcc cctggcagc accatgaact aagcaggaca cctggagggg aagaactgtg
gggacctgga ggcctccaa gactccttc tgcctcctgg acaggactat ggcgtgtgacg
ggatccaga gaagacttct gggctccctc aactccaccc ccacagccat ccccaagctg
gggtgggtg ccaaccagac aggagccgg tgcctggagg tgcctatctc tgacgggctc
ttctcagcc tggggctggt gagcttggtg gagaacgcgc tgggtggtgg caccatcgcc
aagaaccgga acctgcact acccatgtac tgcctcatc tctgctggc cttgtcggac
ctgctggtga gcgggagcaa cgtgctggag acgcccgtca tctcctgctt ggaggccggt
gactgggtgg cccgggctgc ggtgctgacg cagctggaca atgtcattga cgtgatcacc
tgagctcca tgcgtgccag cctctgcttc ctgggcgcca tgcctgtgga cgcctacatc
tccatcttct acgcactgcg ctaccacagc atcgtgacct tgcgcggggc gcggcaagcc
gttgcggcca tctgggtggc cagtgtcgtc ttacagcagc tcttcacgc ctactacgac
cacgtggccg tctgctgtg cctcgtggtc ttcttctggt ctatgctgt gctcatggcc
gtgctgtacg tccacatgct ggcccgggcc tgccagcagc ccaggggcat cgcccggtc

Homo
sapiens

162	3061	Melanocortin NP_002377.2 1 Receptor (MC1R)	LSLNSSTPTA IPQLGLAANQ TGARCLEVSI SDGLFLSLGL VSLVENALVV P ATIAKNRNLI SPMYCFICCL ALSDLLVSGS NVLETAIVILL LEAGALVARA AVLQQLDNVI DVITCSSMLS SLCLFLGAIIV DRYISIFYAL RYHSIVTLPR ARQAVAAIIV ASVVFSTLFI AAYDHSVAVLL CLVVFLLAML VLMVLYVHM LARACQHAQG IARLHKRQRP VHQGFGLKGA VTLTILLGIF FLCWGPFFLH LTLIVLCPEH PTCGCIKFNF NLFALIICN AIIDPLIYAF HSQELRRRLK EVLTCSW	Homo sapiens
163	3079	Melatonin Receptor type 1a NM_005958	cgggcgagc cttaacaagt ggtcgggcg ggcgacgag cgggcgatgg cctcggggcc A gggacgcgaa cagggaaccat gcaggggcaac ggacgagcgc tgcccaacgc ctccagagccc gtgctccgcy gggacggcgc gggccctcgc tggctggcgt ccgcccagc ctgctcctc atcttcacca tctgtgtgga catcctgggc aacctcctgg tcatcctgtc ggtgtatcgg aacaagaagc tcaggaaacgc aggaacacat tttgtgtgga gcttagcgg ggcagacctg gtggtggcca tttatccgta cccgttggtg ctgatgtcga tatttaacaa cgggtggaac ctgggctatc tgcactgcca agtcagtggg gcttagcgtt gcttagcgt catcggtccc atattcaaca tcaccggcat cgccatcaac cgtactgtct acatctgcca cagtctcaag tacgacaaac tgtacagcag caagaactcc ctctgctacg tgctctctat atggctcctg acgtggggcy cgtctctgcc caacctcgt gcagggactc tccagtagca cccagagatc tactcgtgca ccttcgcca gtcgctcagc tccgctaca ccctgcctg ggtgggtttc cacttctcgc tcccctgat catagtcatc gaaacaccca cgtctctttg gctcctctg ctccaggtca gacagaggtt gaaacacacg gaaacaccca aactgaaacc acaggacttc aggaaatttg taccatgtt tgtggttttt gtcctctttg ccatctgtg ggtcctctg aacttcattg gctggccgt ggccctctgac cccgacgca ggtgacctag gatccagag tggctgttg tggccagtt ctacatggcg tatttcaaca gctgacctaa tgccattata tacgggctac tgaacccaaa tttcaggaa gaaacacgga gaattatagt ctgctctgt acagccaggg tgttctttgt ggaacacacg gaaacacgga aactgaggt taaatggaaa ccgtctccac tgatgaccaa caataatgta gtaaaggtgg actcctgta aaaaagcacc acgttccggg tgagatggac acgtgcgca aggcctcgt ctgacagat gtctgggaaa gcagagtgtt ggaggaaact tccaactttt acctggctgc tgccatagt tctgagctaa cgtgctgtca gcattataaa cccctccaat ctactagtca agagaagatc agaattgtatg gagagttaca tgttaactga ggaatggcgt tcaggggctgg ggtgagagta agctgctgaa tgcatccagg ggaaggagt tgcaaacctt tattgtaaa tagtgccaca aaaggggtaa ttgcattctt ctccactttt tgaagacttc tagcagaaaa atgaaagaga attttatta taaatgagca aatggaaaca ttttttttct gtaaatggaa caacaatga aagtggggtg agtgcctctt attacagagg gaaaggctga acataaatca gtaaatggct catcaacaat	Homo sapiens

164	3079	Melatonin Receptor type 1a	NP_005949.1	<p>caaaaccaca accaaacacca caaacctttc agctgggcaga gtagcattg gtagctata ctcatggtca taaatgtttg ccgctctata ttacaagtg tgcatgcaac cagataaaga actaaatcat agcccgagca cagtcgctca cactgtaac ctacgacctt tggaggctg agtgggcag atcaactgag ttacaggagt ttgaccacc ctggggcaac atgatgaaat ccatctcta aaaaaataca aaaaattatc tgggcatggt gcacacgct gtaatccag ctactcagga gactgagtta ggagaatccc ttgagcccca gaggcagagg ttgtggtgag ccgagatcgc gccagtacat tccaaacttag gctacagaat gagactctgc ccaaaaaa aaaaaaa</p>	Homo sapiens
165	3080	Melatonin Receptor type 1b	NM_005959	<p>MQNGSALPN ASQVLRGDG ARPSWLASAL ACVLFTIVV DILGNLLVIL SVYRNKKLRN P AGNIFVSLA VADLVVAIYP YPLVLMISFN NGWNLGYLHC QVSGFLMGLS VIGSIFNITG IAINRYCYIC HSLKYDKLYS SKNSLCYVLL IWLLTAAVL PNLRAGTLQY DPRIYSCTFA QSVSSAYTIA VVEHFLVPM IIVIFCYLRI WILVLQVRQR VKPDRKPKLK PQDFRNFVTM FVFEVLFAC WAPLNFIFGLA VASDPASMPV RIPEWLFVAS YMYAFNSCL NAIYGLLNQ NFRKEYRRII VSLCTARVFF VDSNDVADR VKWKPSPMLT NNNVVKVDSV</p>	Homo sapiens
				<p>acgcgagctg ggcagggaag agagcgcgc gctcagtagt gcgcgcgcgc tgcggctgtc A cggggccgcg cgggtggccaa agcacagcgc gggagagtct gcgatgtcag agaacggctc cttcgccaaac tgctgcgagg cggcgcggtg ggcagtgccg ccgggctggt cggggctgg cagcgcgcgc cctccagga cccctcgacc tccctgggtg gctccagcgc tgcgcgcgt gctcagctgc accacgcgc tggacgtcgt gggcaacctc ctggtgatcc tctcgtgct caggaaccgc aagctccgga acgcaggtaa ttgttcttg gtgagctctg cattggctga cctggtggtg gccttctacc cctaccgcct aatcctcgtg gccatcttct atgacggctg ggcctggggg gaggagcact gcaaggccag cgcctttgtg atgggcctga gcgtcatcgg tctctgtctc aatatcactg ccacgcctac taaccgctac tgctacatct gccacagcat ggcctaccac cgaatctacc ggcgtggga caccctctg cactctgccc tcatctgct cctcaccgtg gtggccttgc tgcaccaact tcttggtggg tccctggagt acgacccacg catctattcc tgcaccttca tccagaccgc cagcaccacg tacacggcgg cagtgggtggt catccacttc ctctcccta tgcgtgtcgt gtccttctgc taccctgcga tctgggtgct ggtgcttcag gccgcgagga agcccaagcc agagagcagg ctgtgcctga agccacgca cttgcgagc ttcttaacca tgttgtgtgt gtttgtgatc ttgacctct gctgggctcc acttaactgc atcgccctcg ctgtggccat caacccccaa gaaatggctc ccagatccc tgagggggcta ttgtcacta gctacttact ggcttattc aacagctgcc tgaatgccat tgtctatggg ctctgaacc aaaaacttcc cagggaatac aagaggatcc tcttgccct ttggaaccca cggcactgca ttcaagatgc ttccaaggc agccacgcgg aggggctgca gagccagct ccacccatca ttggtgtgca gcaccaggca gatctctct agcctggatc tgaggcacac cagcagcatg aaaaactcat gaaatggggt gagagagtct gctgcaaggg tgagaccagg cagcctgctg ggcacactg tccgtgtggc atcacagccc caaggctggg ggaacttcat gctgggacaa gcagcccatc aacgccatgg ttccaggctg atccaggaga tgctcacagg ccacaggacc tggaaaacac tcttggtgtgt gtctgggga ttggtgac acaagaccaa ggaaggaca gaatgaggaa aggcctggg cagaagagcc caactcctc tcatagctga cctcactcct cctgccttgg cctcctggct gcttctccc ctccccca gcatggcagg atctcttct gtagcaagg atgaaagaga gaggtagta ggactggaac</p>	

166	3080	Melatonin Receptor type 1b	NP_005950.1	<p>ttggttaacta caagggcctc aggtggggca ggtgcagagg gc MSENGSFANC CEAGGWAVERP GWSGAGSARP SRTPRPPWA PALSAVLIVT TAVDVGNLL P VILSVLRNRK LRNAGNLELV SLALADLWA FYPYPLILVA IFYDGWALGE EHCKASAFVM GLSVIGSVFN ITAIAINRYC ICHSMAYHR IYRRWHTPLH ICLIWLLTW ALLENFFVGS LEYDPRIYSC TFIQTASTQY TAAVVIHFL LPIAVVSFCY LRWVVLQA RRAKAPESRL CLKPSDLRSF LTMEVFEVIF AICWAPLNCI GLAVAINPQE MAPQIPEGLF VTSYLLAYFN SCLNAIVYGL LNQNERREYK RILLALWNP RHC IQDASKGS HAEGLOSPAP PIIGVQHQA AL</p>	Homo sapiens
167	3081	Melatonin- Related Receptor	NM_004224	<p>tggttgctgt ctggacctgg ctgctgatcc tgaacctgct gggagatctt aacgatcccc A aggagcaaca tggggccac cctagcggtt ccaccccc atggctgtat tggctgtaag ctacccagc cagaataccc accggctcta atcatcttta tgttctgcgc gatggttacc accatcggtg tagacctaat cggcaactcc atggctattt tggctgtgac gaagaacaag aagctccgga attctggcaa catcttcgtg gtcagtctct ctgtggccga tatgctggtg gccatctacc catacccttt gatgctgcat gccatgtcca ttgggggctg gcatctgagc cagttacagt gccagatggt cgggttcac acagggctga gtgtggctcg ctcacatctc aacatcggtg caatcgctat caaccgttac tgcatactct gccacagcct ccagtacgaa cggatcttca gtgtgcgcaa tacctgcac tacctggtca tccactggat catgacctc ctggctgtcc tggccaacat gtacattggc accatcgagt acgatccctg caccacacc tgcatcttca actatctgaa caaccctgtc ttcactgtta ccacgtctg catccactc gtctccctc tctcatcgt gggtttctgc taccgtgagga tctggacca agtgcgtggc gccctgacc ctgcaggcca gaatcctgac aaccaacttg ctgaggttcg caattttcta accatgtttg tgatcttctt cctctttgca gtgtgctggt gccctataca cgtgctcact gtcttggtgg ctgtcagtc ccagagagatg gcaggaaga tcccaactg gctttatctt gcagcctact tcatagccta cttcaacagc tgcctcaacg ctgtgatcta cggctcctc aatgagaatt tccgaagaga atactggacc atcttccatg ctatgaggca cccatcata ttcttccctg gctcatcag tgatatctgt gagatgcagg aggcccgta cctggcccg gcccgtgcc atgctcgca ccaagctcgt gaacaagacc gtgcccagc ctgctcctgct gtggaggaaa ccccgatgaa tgtccggaat gttccattac ctggtgatgc tgcagctggc caaccgacc gtgctctgga caccctaa gcccattcca gatcctcctc tgcctatgc aaatctgctt ctacccacca caagtctgtc tttagccact ccaaggctgc cctggtgca ctcaagcctg tctctggcca ctccaagcct gctctggtc acccaagtc tggcactgtc taccctaagc ctgctctgt ccatttcaag ggtgactctg tccatttcaa ggtgactct gtccatttca agcctgactc tgttcatttc aagcctgctt ccagcaacc caagccatc actggccacc atgtctctg tggcagccac tccaagtctg ccttcagtgc tggcaccagc caccctaacc ccatcaagcc agctaccagc catgctgagc ccacactgc tgcactatcc aagcctgcca ctaccagcca cctaagccc gctgctgctg acaacctga gctctctgcc tcccattgcc ccgagatccc tgcattgccc caccctgtgt ctgacgacag tgacctccct gagtcggcct ctgacctgc cgtggggccc accaagcctg ctgcccagcca gctggagtct gacacatcg ctgaccttcc tgacctact gtagtacta ccagtaccaa tgattaccat gatgtcgtgg ttgttgatgt tgaagatgat cctgatgaaa tggctgtgtg aaaaatgctc tcgtagggtgg ccaggcagt</p>	Homo sapiens

168	3081	Melatonin- Related Receptor	NP_004215.1	<p> MGPTLAVPTP YGICGCKLPQ PEYPPALIIF MFCAMVITIV VDLIGNSMVI LAVTKNKKLR P NSGNIFFVSL SVADMLVAIY PYPLMLHAMS IGGWDLSQLQ QMVGFITGL SWVGSIFNIV AIAINRYCYI CHSLQYERIF SVRNTCIYLV ITWIMTVLAV LPNNYIGTIE YDPRTYTCIF NYLNNPVFTV TIVCIHFVLP LLIVGFCYVR IWKVLAARD PAGQNPQNQL AEVRNFLTME VIFLLFAVCW CPINVLTVL AVSPKEMAGK IPNWLILAAV FIAYFNSCLN AVIYGLLNE FRREYWTIFH AMRHPPIIFP GLISDIREMQ EARTLARARA HARDOAREQD RAHACPAVEE TPMNVNRNVL PGDAAGHPD RASGHPKPHS RSTHKSVPFSH SKAASGHLKP VSGHSPASG HPKSATVYPK PASVHFKGDS VHFSGDVSFH KPDVHFKPAA SSNPKPITGH HVSAGSHSKS AFSAATSHPK PIKPATSHAE PTTADYPKPA TTSHPKPAAP DNPELSASHC PEIPAIAHPV SDDSDLPEA SSPAAGPTKP AASQLESMTI ADLPDPTWVT TSTNDYHDVV VVDVEDDPDE MAV </p>	Homo sapiens
169	3093	Metabotropic Glutamate Receptor 1	NM_000838	<p> gaattccctt acaaacgcct ccagcttgta gaggcggtcg tggaggaccc agaggaggag A acgaaggga aggaggcggt ggtggaggag gcaaggcct tggacgacca ttgttgccga ggggcaccac tccgggagag gcggcgctgg gctcttggtg ggtgcgcgcc gggagcctgc agcgggacca gctggggaac gcgctgggca ggtctgggac ctgctcctca ccaccatggt cgggctcctt ttgttttttt tccagcgat cttttggag gtgtcccttc tccccagaag cccgggcagg aaagtgtgc tggcaggagc gtctgtctcag cgctcggtgg ccagaaatgga cggagatgtc atcattggag cctctcttc agtccatcac cagctccgg ccagaaatgga gcccagagg aagtgtggg agatcaggga gcagtaggc atccagagg tggaggccat gtccacacg ttggataaga tcaacgcgga cccgtctctc ctgcccaaca tcacctggg cagttagatc cgggactcct gctggcactc ttccgtggct ctggaacaga gcattgagtt cattaggac tctctgatt ccattcgaga tgagaaggat gggatcaacc ggtgtctgcc tgacggccag tccctccccc caggcaggac taagaagccc attgcgggag tgatcggtcc cggctccagc tctgtagcca tcaagtgca gacctgctc cagctcttcg acatcccca gatcgcttat tcagccacaa gcacgcacct gactgacaaa acttgtaga aatactctc gagggtgtc ccttctgaca cttgacagg aagggccatg cttgacatag tcaaacgtta caattggacc tatgtctctg cagtcacac ggaagggaat tatggggaga gcggaatgga cgctttcaaa gagctggctg cccagggaag cctctgtatc gccattctg acaaaatcta cagcaacgct ggggagaaga gctttgaccg actcttgccg aaactccgag agaggcttcc caaggctaga gtggtggtct gcttctgtga aggcattgaca gtgcaggag tctgagcgc catgcgccg cttggcgctg tggcgaggt ctcactcatt ggaagtgat gatgggcaga cagagatgaa gtcatgaa gttatgaggt ggaagccaac gggggaatca cgataaagct gcagtctca gaggtaggt cattgatga ttattcctg aaactgaggc tggacactaa cagcaggaa cctggttcc ctgagttctg gaacatcgg ttccagtgc ccttccagg acacctctg gaaaatccca actttaaacg aatctgcaca ggaatgaaa gcttagaaga aaactatgtc caggacagta agatggggtt tgtcatcaat gccatctat ccattggaaga tgggctgcag aacatgcacc atgcccctctg ccttgccac gtgggcccct gcgatgccat gaagcccatc gacggcagca agctgctgga cttctctc aagtcctcat tcattggagt atctggagag gagggtggt ttgatgagaa aggagacgt cctggaaggt atgatcat gaatctgcag tacactgaag ctaatcgcta tgactatgt cagcttgaa cctggcatga aggagtgctg aacattgatg attacaaaat ccagatgaac aagagtggag tggcgcggtc </p>	Homo sapiens

tgtgtgcagt gaggccttgct taaaggggcca gattaagggtt atacggaaag gagaagttag
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taaatatttt ctatttatt

170 3093 Metabotropic NP_000829.1 MVGLLLFFFP AIFLEVSLLP RSPGRKVLLA GASSQSRVAR MDGVIIGAL FSVHQPPAE P Homo

Glutamate
Receptor 1

sapiens

KVPERKCGEI REQYGIQORVE AMFHTLDKIN ADFVLLPNIT LGSEIRDSCW HSSVALEQSI
EFIRDSLISI RDEKDGINRC LPDQSLPPG RTKKPIAGVI GPGSSSVAIQ VQNLQLFDI
PQIAYSATSI DLSDKTLKY FLRWPSDTL QARMLDIVK RYNWTVSAV HTEGNYGESG
MDAFKELAAQ EGLCIAHSDK IYSNAGEKSF DRLRLKLRER LPKARVVVCF CEGMTVRGLL
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IMNLQYTEAN RYDXVHVGTW HEGVLNIDDY KIQMNKSGW RSVCSPECLK GOIKVIRKGE
VSCCWICTAC KENEYVQDEF TCACADLGMW PNADLTGCEP IPVRYLEWSN IESIIAIAFS
CLGILVTLFV TLIFVLYRDT PVKSSSREL CYIILAGIFL GYVCPFTLIA KPTTSCYLQ
RLLVGLSSAM CYSALVTKTN RIARILAGSK KKICTRKPRF MSAAQVIA SILISVQLTL
VVTLLIMEPP MPILSYPSIK EYLLICNTSN LGVAPLGN GLLMSCTYY AFKTRNVSPAN
FNEAKYIAFT MYTTCIIWLA FVPIYFGSNY KIITTCFAVS LSVTVLGMCM FPKMYIIIA
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QLSTFGEELV SPPADDDDDDS ERFKLLQEV YEHEREGNT EDELEEEED LQAASKLTLPD
DSPALTTPSP FRDSVASGSS VPSPVSESV ICTPPNVSYA SVILRDYKQS SSTL

171

3094

Metabotropic NM_000839
Glutamate
Receptor 2

Homo
sapiens

ccatgggatc gctgcttgcg ctcctggcac tgctgcccgt gtgggtgctg gtggctgagg A
gccacagcaa gaaggtgctg accctggagg gagacttggt gctgggtggg ctgttcccag
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172	3094	Metabotropic NP_000830.1 Glutamate Receptor 2	aggctccgctt tgaccgcttt ggtgatggta ttggcccgcta caacatcttc acctatctgc gtgcaggcag tggcgctat cgctaccaga aggtgggcta ctggggcaga ggcttgactc tggacaccag cctcatccca tgggctctac cgtcagccgg cccctggcc gcctctcgct ggagtggcc ctgctccag aatgaggtga agagtgtga gccgggcgaa gctgctgct ggctctgcat tccgtgccag cctatgagt accgattgga cgaattcaat tgcgctgatt gtggcctggg ctactggccc aatgccagc tactggctg cctcgaaactg cccaggagt acatccgctg gggcgatgcc tgggctgtgg gacctgtac catcgctgc ctggtgccc tggccacct gttgtgtg ggtgtcttg tggcgacaa tggcacacca gtggtcaagg cctcaggtcg gtagctctgc tacatctgc tgggtgtgt cttctctgc tactgcatga ccttcattt cattgccaag ccatccacgg cagtgtgtac cttacggcgt cttggtttg gcaatgctt ctctgtctg tactcagccc tgcacacaa gaccaaccg attgcacgca tcttcgttg ggcggggag ggtgccagc ggcacgctt catcagctt gctcacagg tggccatctg cctggcactt atctgggccc agctgctcat cgtggtcgcc tggctggtg tggaggcacc gggcacagg agggagacag ccccggaacg gcgggaggtg gtgacactgc gctgcaacca ccgcatgca agtatgttg gctcgtggc ctacaatgtg ctcctcatcg cgtctgcac gctttatgcc ttcaatactg gcaagtggc cgaatactt aacgagcca agttcattg cttcaccatg tacaccact gcatcctct gctggcattg ttgcccatt tctatgtcac ctcagtgac tacgggtac agaccacac catgtgcgtg tcaagtcagg tcagcggctc cgtggtgctt ggctgctct tggcgccaa gctgcacatc atcctcttc agccgcagaa gaacgtggtt agccaccggg caccacacag ccgctttggc agtgcgtg ccagggccag ctcagcctt gccaagggt ctggctccca gttgtgccc actggttgca atggccgtga ggtggtggac tgcacaactg catcgctttg a	Homo sapiens
173	3095	Metabotropic NM_000840 Glutamate Receptor 3	gtgagccgctt tgaccgcttt ggtgatggta ttggcccgcta caacatcttc acctatctgc gtgcaggcag tggcgctat cgctaccaga aggtgggcta ctggggcaga ggcttgactc tggacaccag cctcatccca tgggctctac cgtcagccgg cccctggcc gcctctcgct ggagtggcc ctgctccag aatgaggtga agagtgtga gccgggcgaa gctgctgct ggctctgcat tccgtgccag cctatgagt accgattgga cgaattcaat tgcgctgatt gtggcctggg ctactggccc aatgccagc tactggctg cctcgaaactg cccaggagt acatccgctg gggcgatgcc tgggctgtgg gacctgtac catcgctgc ctggtgccc tggccacct gttgtgtg ggtgtcttg tggcgacaa tggcacacca gtggtcaagg cctcaggtcg gtagctctgc tacatctgc tgggtgtgt cttctctgc tactgcatga ccttcattt cattgccaag ccatccacgg cagtgtgtac cttacggcgt cttggtttg gcaatgctt ctctgtctg tactcagccc tgcacacaa gaccaaccg attgcacgca tcttcgttg ggcggggag ggtgccagc ggcacgctt catcagctt gctcacagg tggccatctg cctggcactt atctgggccc agctgctcat cgtggtcgcc tggctggtg tggaggcacc gggcacagg agggagacag ccccggaacg gcgggaggtg gtgacactgc gctgcaacca ccgcatgca agtatgttg gctcgtggc ctacaatgtg ctcctcatcg cgtctgcac gctttatgcc ttcaatactg gcaagtggc cgaatactt aacgagcca agttcattg cttcaccatg tacaccact gcatcctct gctggcattg ttgcccatt tctatgtcac ctcagtgac tacgggtac agaccacac catgtgcgtg tcaagtcagg tcagcggctc cgtggtgctt ggctgctct tggcgccaa gctgcacatc atcctcttc agccgcagaa gaacgtggtt agccaccggg caccacacag ccgctttggc agtgcgtg ccagggccag ctcagcctt gccaagggt ctggctccca gttgtgccc actggttgca atggccgtga ggtggtggac tgcacaactg catcgctttg a	Homo sapiens

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174	3095	Metabotropic NP_000831.1 Glutamate Receptor 3	<p>tggtttgtttg caccacaagt tcaatcatc ctgtttcaac ccagaagaa tggtgtcaca cacagactgc acctcaacag gttcagtgct agtgaactg ggaccacata ctctcagtc tctgcaagca cgtatgtgcc aacggtgtgc aatggcgagg aagtccctga ctccaccacc tcatctctgt gattgtgaat tgcagttcag ttcttgtgtt tttagactgt tagacaaaa tgctcacgtg cagctccaga atattgtgag gaggcaaaag aacaacccta gtacctttt ttagaaacag tacgataaat tatttttgag gactgtatat agtcatgtgc tagaactttc taggctgagt ctagtcccc tattattaac aattcccca gaacatggaa ataaccattg ttacagagc tgagcattgg tgacagggtc tgacatgggc agtctactaa aaaacaaaa aaaaaaacaa aaaaaaaa ctatgaagtt tttgtaggt cctgttgtga actaattag gatgagttc accttttttc ctatgaagtt cttgtaggt cctgttgtga actaattag gatgagttc tatgttgtat attaaagtta cattatgtgt aacagattga ttttctcagc acaaaataaa aagcatctgt attaatgtaa agatactgag aataaaacct tcaaggtttt</p>	Homo sapiens
			<p>MLTRLQVLT ALFSKGFLLS LGDNFLRRE IKIEGDLVLG GLFPINEKGT GTEECGRINE P DRGIQRLEAM LEAIDEINKD DYLLPGVKLG VHILDTCSR DYALEQSLEF VRASLTKVDE AEYMCPLDGSY AIQENIPLLI AGVIGGSYS VSIQVANLLR LFOIPQISYA STSAKLSDKS RYDYFARTVP PDFYQAKAMA EILRFENWTY VSTVASEGDY GETGIEAFEQ EARLRNICIA TAEKVGRSNI RKSYSVIRE LLQKNARVV VLFMRSDDSR ELIAAASRAN ASFTWVASDG WGAQESIIG SEHVAYGALT LELASQVRQ FDRYQSLNP YNNHRNPWR DFWEQKFQCS LQKNRNRHV CDKHLAIDSS NYEQESKIMF VVNAVAMAH ALHKMQRTL PNTTKLCDAM KILDGKKLYK DYLLKINFTA PFNPNKDADS IVKEDTFDGD MGRYVNFNQ NVGGKYSYLK VGHWAETLSL DVNSIHWSRN SVPTSQCSDP CAPNEMKNMQ PGDVCCWICI PCEPYEYLAD EFTCMDGSG QWPTADLTGC YDLPEDYIRW EDAAIGPVT IACLGFMCTC MVTVTFIKHN NTPLVKASGR ELCYILLFGV GLSYCMTFFF ISPSQVVIC LRLGLGSSF AICYSALLTK TNCIARIFDG VKNGAQRPKF ISPSQVVIC YDVLVILCT VYAFKTRKCP ENFNEAKFIG FTMYYTTCIIW RETVILKCNV KDSSMLISLT YDVLVILCT VYAFKTRKCP ENFNEAKFIG FTMYYTTCIIW LAFLPIFYVT SSDYRVQTTT MCISVSLSGF VVIGCLFAPK VVTHRLHLN RFSVSGTGT YSQSSASTYV PTVNGREVL DSTSSL</p>	
175	3096	Metabotropic NM_000841 Glutamate Receptor 4	<p>ccgagtgaca aggaggtggg agaggtgagc agcatgggct acgcggttg ctgccctcag A tccccctgct gctgaagctg cccctgcccac gccaccccag gccgtggggc cagggggcctg ccagggtcag gagtgggctt gccgttcacg ggtctctagg gatttccag atgcttgga agagaggtt gggctggttg tgggcccgcg tggcctcttg cctgctctc agcctttacg gccccctgat gcttctctc ctgggaaagc ccaaaaggcca cctcacatg aattccatcc gcatagatgg gacatcaca ctgggagggc tgttcccgtt gcatggcccg ggtcagagg gcaagccctg tggagaactt aagaaggaaa agggcatcca ccggtggag gccatgctgt tcgcccctgga tcgcatcaac aacgaccccg acctgctgcc taacatcag ctggggccc gcattctgga cactgctcc agggacacc atgcccctga gcagtcgctg acctttgtc aggcgctcat cgagaaggat ggcacagagg tccgctgtgg cagtgggcg ccacccatca tcaccaagcc tgaacgtgtg tgggtgttca tcggtgcttc agggagctcg gtctccatca tgggtggccaa catccttcgc ctcttcaaga taccacagat cagctacgcc tccacagcgc cagaacctgag tgacaacagc cgctacgact tcttctccc cgtgggtgcc tcggacacgt accaggccca ggcctatggtg gacatcgtcc gtgccctcaa gtgtccacag</p>	Homo sapiens

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176	3096	Metabotropic NP_000832.1 Glutamate Receptor 4	<p>caccttttcc ctctctggcg tccccggctg cttgtactct tggccttttc tgtgtctcct tctgtgctct tgcctcgcgc tctctctctc atcctctttg tccctcagctc ctcctgcttt cttgggtccc accagtgtca cttttctgcc gttttctttc ctgttctcct ctgcttcatt ctcgtccagc cattgtctcc ctctccctgc caccctccc cagttcacca aaccttacat gttgcaaaag agaaaaaag aaaaaaatc aaaaacaaa aagccaaaa cgaacaaaa tctcgagtgt gttgccaagt gctgcgtcct cctggtggcc tctgtgtgtg tccctgtggc ccgcagcctg ccgcctgccc ccgcccctct gcccgtgtgc ttgcccgcct gccccgcgc tctgcccgtc gtcttgcccg cctgcccgcg acaatgtgta gcgcatgatt gtttttatac tgccctgggtg tttgtgtgat gttattgacg acaatgtgta gcgcatgatt gtttttatac caagaacatt tctaataaaa ataaacacat ggttttgcaa aaaa</p> <p>MPGKRGGLWM WARPLCLLL SLYGPMWPS LGKPKGHPHM NSIRIDGIT LGLFPVHGR P GSEKPCGEL KKEKGIHRL AMLFALDRIN NDPDLNIT LGARILDTC RDTHALEQSL TFVQALIEKD GTEVRCGSGG PPIITKPERV VGVIGASGSS VSIMVANILR LFKIPQISYA STAPDLSDNS RYDFFSRVVP SDTYQAQAMV DIVRAKWNV VSTVASEGSY GESGVEAFIQ KSREDGGVCI AOSVKIPREP KAGEFDKIIR RLLETSNARA VIIFANEDDI RRVLEAARRA NOTGHFFWVG SDSWGSKIAP VLHLEVAEG AVTILPKRMS VRGFDRYFSS RTLDNNRRNI WFAEFWEDNF HCKLSRHAK KGSVKKCTN RERIGQDSAY EQEGKVQFVI DAVYAMGHAL HAMHRDLCPG RVGLCPRMDP VDGTLQLLKYI RNVNFSGIAG NPVTENEGD APGRYDIYQ QLRNDSAEYK VIGSWTDHLH LRIERHWPFG SQQLPRISIC SLPCQPERK KTVKGNPCCW HCEPCTGYQY QVDRYTCKTC PYDMRPTENR TGCRIPIIK LEWGSPPAVL PLFLAVVGIA ATLFVWITFV RYNDTPIVKA SGRELSYLL AGIFLCYATT FLMIAEPDLG TCSLRIFLIG LGMSISYAAL LTKTNRIYRI FEQGRKRSVA PRFISPASQL AITFSLISLQ LLGICVWFVW DPSSHVVDFQ DQRTLDPRFA RGVLKCDISD LSLICLLGYS MLLMVTCTVY AIKTRGVPEP FNEAKPIGET MYTTCIVWLA FIPIFFGTSQ SADKLYIQTT TLTVSLSLSA SVSLGMLYMP KVYIILFHEP QNVPRKRSL KAVVTAATMS NKFTQKGNFR PNGEAKSELC ENLEAPALAT KQTYVTYNH AI</p>	Homo sapiens
177	3097	Metabotropic NM_000842 Glutamate Receptor 5	<p>acaaaatggt ccttttagaaa atacatctga attgctggct aatttcttga tttgcgactc A aacgtaggac atcgcttgtt cgtagctatc agaaccctcc tgaattttcc ccaccatgct atctttattg gcttgaactc ctttctctaaa atggtccttc tgttgatcct gtcagtctta cttttgaaag agatgtccg tgggagtga cagtcctcag agaggagggt ggtggctcac atgccgggtg acatcattat tggagctctc ttttctgttc atcaccagcc tactgtggac aaagtccatg agaggaagt tggggcggtc cgtgaacagt atggcattca gagagtggag gccatgctgc ataccctgga aaggatcaat tcagacccca cactcttggc caacatcaca ctgggctgtg agataaaggga ctctgctgg cattcggctg tggccctaga gcagagcatt gagttcataa gagattccct cattcttca gaagaggaag aaggcttggc acgctgtgtg gatggctcct cctcttctct ccgctccaaag aagccctag taggggtcat tgggctggc tccagtctg tagccattca ggtccagaat ttgctccagc ttttcaacat acctcagatt gcttactcag caaccagcat ggtatctgagt gacaagactc tgttcaataa tttcatgagg gttgtgcctt cagatgctca gcaggcaagg gccatggtg acatagtga gaggtacaac tggacctatg tatcagccgt gcacacagaa ggcaactatg gagaagtgg gatggaagcc ttcaaaagata tgcagcgaa ggaagggtt tgcctcgccc actcttaca aatctacagt</p>	Homo sapiens

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[illegible]

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180	3098	Metabotropic NP_000834.1 Glutamate Receptor 6	<p> tgggcctctc tggcaggaac tctgatgcac cgcgagggcc atgtactcct gtggctttct cacattcggt ctacttgag ggtatctcca cagcatgcac cattctgggt acagggggac atcctctgtt actgaagatg ttgtcatatt tagtaccttc acaaggtttc tctccttcca gaattttctg atgtacacaa ataaactgact tccacaagag ggcttttcca cactcgtgtg gtgcatacag tttctgcctg tgatcatttc tttatgttat tttttattt tttcgagata gggtcttgct caatttctta gctcggagtg cagtggcag atcatagctc actgaagttt cgacctggc tcaagcaatc ctccgcttc agctcctga gtagctgggt cgcacgacca tacctagcta atgttttatt tttgttagag acgaggtctc actatgttgc ccaggctggt ctcgaacttc tgagctcgag cgatcctcct gcctccacct ccaaaagtgt tcggattaca aacgtgagcc atcgaccta gctcctttga tcaattctgt ggtgttcagt gggggttgac agctcctaa agattttcct gtttttttgc atgcatgggt ttgaattcct tgagggtccaa tttatgttga cccctgaata aagttttgtg ggttttcttc tatgtgtgga attatatagg cattcttcca gtgtggttcc tcttatgtcg agtgagagct gacctgcacc gaagtttgtc ccatttgttg ccttgaatt atctgtatga attatatgtt ccagtgaata tggagttctg ggttggagcc ttattccatg tttacacaaat taaaattgca gtgttctcct ctgggatgag agctctaaag cagagtaaga ttacgttctg atgtaagctt taaccacctt ttataaagt ctcactctg gtccactgtg ttgagacttc tacagaagag cttctgtata gtaaccattt tcttaggctg tctcacttgt gtgaatcttc tgacacattt attatagctt tgtcccat cttatccttt ttgctcttta gaaatttccc tttaatattt tacattcatt gcttactgta aagagtccag gtaactgact ttaattcaag ttacttctctg ttaacttttc cc </p>	Homo sapiens
181	3099	Metabotropic NM_000844 Glutamate Receptor 7	<p> KKEQGVHRL AMLYALDRVN ADPELLPGVR LAQAGLARA GSVRLAGLIT LGGLFPVHAR GAAGRACGPL P GDGDEVGVR PGGVPLRPA PPERVAVVG ASASSVIMV LGARLDTCS RDTYALEQAL SFVQALIRGR LSDSTRYDF SRVPPDSYQ AQAMVDIVRA LGWNVYSTLA SEGNYGESV EAFVQISREA GGVCIAQSIK IPREPGEF SKVIRRLMET PNARGIIFA NEDDIRRVLE AARQANLTGH FLWVGSDSWG AKTSPILSLE DVAVGATIL PKRASIDGFD QYFMTSRLEN NRRNIWFAEF WEENFNCKLT SSGTQDDST RKCTGEERIG RDSTYEQEGK VQFVIDAVYA IAHALSHMHQ ALCPGHTGLC PAMEPTDGRM LLQYIRAVRF NGSAGTPVMF NENGDAAGRY DIFQYQATNG SASSGGYQAV GQWAEIIRLD VEALQWSDGP HEVPSSLCSL PCGPGERKKM VKGVPCWHC EACDGYRFQV DEFTCEACPG DMRTPNHTG CRPTPVVRLS WSSPWAAPPL LLAVLGIVAT TTVATFVRY NNTPIVRASG RELSYLLTG IFLLIYAITFL MVAEPGAACV AARRLFGLG TTLSYSALLT KTNRIYRIFE QGKRSVTPPP FISPTSQLVI TFSLTSLQV GMIAWLGARP PHSVIDYEEQ RTVDPEQARG VLKCDMSDLS LIGCLGYSLI LMVTCTVYAI KARGVPETFN EAKPIGFTMY TTCIIWLAFV PIFFGTAQSA EKIYIQTITL TVSLSLASV SLGMLYVPKT YVILFHPEQN VQKRKRLKA TSTVAAPKG EDAEAHK gaattcccaa caccaggta atttttgtat ttttagtaga gattgggttt caccatgttg A gccaggatgg tctccatctc ttgacctcgg gatcctctcg gcttggtctc caaaagtgtc gggattacag gcatgagta ccatatccag ccaactgcag tcattcttat ggggcaaaaca cttggttgaa cccagggttt ctaagatac aaacctatgg gcaacaccaa gcatctta ggaaataggca cctggctgac tccaggcatt ctaataatag agacacctgg gcgaactcag </p>	Homo sapiens

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182	3099	Metabotropic NP_000835.1 Glutamate Receptor 7	tactgtgtat gccatcaaga ctcgggggtgt acccgagaat ttttaacgaag ccaagcccat tgattccact atgtacacga catgtatagt atggcttgcc ttcatccaa tttttttgg caccgtcaa tcagcggaag agctctacat acaaatccg acgcttacaa tctccatgaa cctaagtga tcagtggcgc tgggatgct atacatgcc aagtggtaca tcatcatttt ccacctgaa ctcaatgtcc agaaacgga gcgaagcttc aaggcggtag tcacagcagc caccatgtca tcgaggctgt cacacaaacc cagtgcaga cccaacggtg agcacaagac cgagctctgt gaaaacgtag acccaaacag cctgtctga aaaaagaagt atgtcagtta taataacctg gttatctaac ctgttccatt ccatggaacc atggaggagg agaccctca gttattttgt caccacacct ggcataggac tctttgtcc taccgcttc ccatcacccg aggagcttc ccggccggga gaccagtgt agaggatcca agcgacctaa acagtgcct tatgaaatat ccttacttta tctgggctta ataagtcact gacatcagca ctgccaactt ggctgcaatt gtggaccttc cctaccaaag ggagtgtga aactcaagtc ccgccccggc tctttagaat ggaccactga gagccacag accgttttg ggctgacctg tcttattacg tatgtacttc taggttgcaa ggttttgaaa tttctgtac agttgtgag gacctttgca ctttgccatc tgatgtcgta cctcggttca ctgtttgttc tcgaatgcct tgttttcata gagccctatt ctctcagac gtggaatatt tggaaaaatt taaaaacaat taaaatttta aagcaatctt ggcagactaa aacaagtaca tctgtacatg actgtataat tacgattata gtaccactgc acatcatgtt ttttttttt aagacaaaaa agatgtttta agacaaaaa ctgtgctgag aagtatgccc ccacctatct ttggtatag ataggtttaca taaaagggaag gtattggctg aactgaatag aggtcttgat ctttggaatg catgccagta atgtatttta cagtacatgt ttattatgtt caatatttgt atttgtgttc tctttgtta ttttaatta gggtatatga atattttgca ataattttta taattattaa gctgtttgaa ggaaagaata tggtattttc atgtcttgag gttttgttca tgcctcttt gactgacag tgtgataagg actttaggaa aaaaagcatg tatgtttttt actgctttt ataagtaact tcgttaactc tgctgcttat gtgccaattt agtggaaaaa acaaacctt gctgaaaaat tccctcttcc cattctctt caattctgtg atattgtca agaattgtatc aataaggaat tc MVQLRKLRLV LTIKFPCCV LEVLLCALAA AARGQEMYAP HSIPIEGDVT LGGLFPVHAK P GPSGVPCGDI KRENGIHRLE AMLYALDQIN SDPNLLPNVT LGARILDTC RDTYALEQSL TFVQALIQKD TSDVRCNGE PPVFKPEKV VGVIGASGSS VSMVANILR LFQIPQISYA STAPELSDDR RYDFSRVVP PDSFQAQAMV DIVKALGWNY VSTLASEGSY GEKGVESFTQ ISKEAGGLCI AQSVRIQPER KDRTIDFRI IKQLLDTNPS RAVVIFANDE DIKQILAAAK RADQVGHFLW VGSWSGSKI NPLHQHEDIA EGAIITQPKR ATVEGFDAYF TSRTLENNRR NWFAEYWE NFNCKLTISG SKKEDTRKC TGEQEGKVQF VIDAVYAMAH ALHHMNKDL C ADYRGVCPM EQAGGKKLLK YIRNVNFGS AGTPVNFKN GDAPGRYDIF QYQTTNTSNP GYRLIGQWTD ELQNIEMQ WGKGVREIPA SVCTLPCKPG QRKTKQGT CCWTCEPCDG YQYQFDEMT C QHCPYDQRP ENRTGCQDIP I IKLEWHSPW AVIPVFLAML GIATIFVMA TFIYNDTPI VRASGRELSY VLLTGIFLCY IITFLMIAP DVAVCSFRRV FLGLGMCISY AALLTKTNRI YRIFEQKKK VTAPLISPT SQAITSLLI SVQLLGVIW FGVDPNNII DYDEHKTNP EQARGVLKCD ITDLQIICSL GYSILLMVT TVYAIKTRGV PENFNEAKPI GFTMYTTCIV WLAFIGPFG TAQSAEKLYI QTTILTISMN LSASVALGML YMPKVYIIIF HPELNVQKRK RSEKAVVTAA TMSRLSHKP SDRPNGEAKT ELCENVDPNS
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Homo
sapiens

183	3100	Metabotropic Glutamate Receptor 8	Metabotropic NM_000845	PAKKKKYVS Y NNLVI	Homo sapiens
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				gtccaaattg taattgatgc tgtatatcc atggcttacg cctgcacaa tatgcacaaa	
				gatctctgcc ctggatacat tggcctttgt ccacgaatga gtaccattga tgggaaaag	
				ctacttgggtt atattcgggc tgtaaaattt aatggcagtg ctggcactcc tgtcactttt	
				aatgaaaaacg gagatgctcc tggacgttat gatatctcc agtatcaaat aaccaacaaa	
				agcacagagt acaagtcac cggccactgg accaatcagc ttcatctaaa agtggagag	
				atgcagtggg ctcatagaga acatactcac cggcgctctg tctgcagcct gccgtgtaag	
				ccaggggaga ggaagaaaac ggtgaaaagg gtcccttgct gctggcactg tgaacgctgt	
				gaagggttaca actaccaggt ggatgagctg tccctgtgaac tttgccctct ggatcagaga	
				cccaacatga accgcacagg ctgccagctt atcccacatc tcaaatgga gtggcattct	
				ccttgggctg tgggtccctgt gtttgttgca atattgggaa tcactgccac cactttgtg	
				atcgtgacct ttgtccgcta taatgacaca cctatcgtga gggcttcagg acgcgaactt	
				agttacgtgc tccaaacggg gatttttctc tgttatccaa tcacgttttt aatgattgca	
				gcaccagata caatcatatg ctccttccga cgggtctctc taggacttgg catgtgtttc	
				agctatgcag ccttctgac caaaacaaac cgtatccacc gaattattga gcaggggaag	
				aaatctgtca cagcgcacaa gttcattagt ccagcatctc agctggtgat cacttcagc	
				ctcatctccg tccagctcct tggagtgttt gtctggtttg ttgtggatcc cccccacac	
				atcattgact atggagagca gcggacacta gatccagaga aggccagggg agtgcctcaa	
				tgtgacattt ctgatctctc actcatttgt tcaatttggat acagtatcct cttgatggtc	

184	3100	Metabotropic NP_000836.1 Glutamate Receptor 8	actgtgactg tttatgcaa taaaacgaga ggtgtcccag agaatttcaa tgaagccaaa cctattgat ttaccatgta taccacctgc atcatcttgg tagctttcat cccatcttt tttggtacag cccagtcagc agaaaagatg tacatccaga caacaacact tactgtctcc atgagtttaa gtgcttcagt atctctgggc atgctctata tgcccaaggc ttatatata attttcattc cagaacagaa tgttcaaaa cgaagagga gcttcaaggc tgtggtgaca gctgccacca tgcaaacgaa actgatccaa aaaggaaatg acagaccaa tggcgaggcg aaaagtgaac tctgtgagag tcttgaaacc aacacttctt ctaccaagac aacatatatc agttacagca atcattcaat ctgaaacagg gaaatggcac aatctgaaga gacgtggtat atgatcttaa atgatgaaca tgagaccgca aaaattcact cctggagatc tccgtagact acaatcaatc aaatcaatag tcagtcttgt aggaacaaa aattagccat gagccaaaag tatcaataaa cggggagtag agaaacccgt ttatacaaat aaaaaccaat agtccaagc taaagtattg cttattcatg agcagttaaa acaaatcaca aaaggaaaa taatgttagc tcgtgaaaaa aatgctgttg aaataataaa tgtctgatgt tattcttgta ttttctgtg atttgagaaa ctcccgttcc tgtccacat tgtttaactt gtataagaca atgagctctg ttcttgtaat ggctgaccag attgaagccc tgggttgtagc taaaaataaa tgcaatgatt gatgcatgca atttttata caaataattt atttctaata ataaaggaat gttttgcaaa aaaaaaaaa aaaaactcga g	Homo sapiens
185	3212	Opioid mu- type Receptor	gaaattccgg ctataggcag aggagaatgt cagatgctca gctcgggtccc ctccgctga A cgctcctctc tgtctcagcc agactgggt tctgtaagaa acagcaggag ctgtggcagc ggcgaagga agcggctgag gcgcttgaa cccgaaaagt ctcggtgctc ctggctacct cgcaacggg tggccgccc gcccgcagta ccatggacag cagcgtgccc cccacgaacg ccagcaattg cactgatgcc ttggcgtagt caatggtagc cccagcacc agccccggtt cctgggtcaa cttgtccac ttagatggca acctgtccga ccatcgccg cgaaccgca ccaacctggg cgggagagac agcctgtgccc ctccgaccgg cagtcctccc atgatecgg ccatcacgat catggccctc tactccatcg tgtgctggtt ggggctcttc ggaacttcc	Homo sapiens

186	3212	Opioid mu- type Receptor	NP_000905.1	<p> ttggtcatgta tgtgattgtc agatacacca agatgaagac tgccaccaac atctacattt tcaaccttgc tctggcagat gccttagcca ccagtagcct gccctccag agtgtgaatt acctaatggg aacatggcca ttggaacca tcccttgcaa gatagtgc tccatagatt actataacat gttcaccagc atattcacc tctgcaccat gagtgttgat cgatacattg cagtctgcca cctgttcaag gccttagatt tccgtactcc ccgaaatgcc aaaattatca atgtctgcaa ctggatcctc tcttcagcca ttggtcttcc tgtaatgttc atggtacaa caaataacag gcaagggtcc atagattgta cactaacatt ctctcatcca acctggtact gggaacacct cgtgaagatc tgtgttttca tcttcgctt cattatgcca gtgtcatca ttaccgtgtg ctatggactg atgattcttgc gccacagag tgtccgcatg ctctctggct ccaaaagaaa ggacaggaat ctctgaagga tcaccaggat ggtgctggtg gtggtggctg tttcatcgt ctgctggact cccattcaca ttacgtcat cattaaagcc ttggttaca tcccagaac tacgttccag actgttctt ggcactctg cattgtcta ggttacacaa acagctgctt caaccagtc ctctatgcat ttctggatga aaacttcaaa cgatgttca gagagttctg tatcccaacc tcttccaaca ttgagcaaca aaactccact cgaattcgtc agaacactag agaccacccc tccacggcca atacagtga tagaactaat catcagctag aaaatctgga agcagaaact gctcgttgc cctaacaggg tctcatgcca tccgacctt caccagctt agaagccacc atgtatgtg agcaggttg cttaagaat ggttaggag ctctaattct ctaggaaagt gctactttt aggtcatcca acctcttcc tctctggcca ctctgctctg cacattagag ggacagccaa agtaagtgg accttttga aggaagga tataccacac cgaggagtcc agtttgtga agacaccag tggaacccaa acccatcgtg gtatgtgaat tgaagtcac ataaagggtg acctctctg ctgtaagatt ttattttca gcaaatattt atgacctcaa caaagaagaa ccatctttt ttaagttcac cgtagtaaca cataaagtaa atgctacctc tgatcaaaag accttgaatg gaaggtccga gtctttttag tgtttttgca agggaatgaa tccattattc tattttagac ttttaacttc aacttaaaat tagcatctgg ctaaggcatc attttccact ccatttcttg gttttgtatt gtttaaaaa aataacatct ctttcatcta gctccataat tgcaaggga gagattagca tgaagggtaa tctgaacac agtcattgtg canctgtaga aggttgatt ctcatgcact ncaataactt ccaagagatc atcatggggg attttccatt cttaggcttt cagtgggttg tctctggaat tc </p>	Homo sapiens
187	3223	Muscarinic acetylcholin e Receptor M1	NM_000738	<p> atgaacactt cagccccacc tgcgtcagc cccaacatca ccgtcctggc accaggaag A ggtccctggc agtggcctt cattgggac accacgggc tctgtcgtc agccacagt acaggcaacc tgcgtgact catctcttc aggttcaaca cggagctcaa gacagtcaat aactactcc tgctgagcct ggcctgtgct cagctcatca tcggtacctt ctccatgaac ctctatacca cgtacctgct catggggccac tgggctctgg gcacgtggc ttgtgacctc </p>	Homo sapiens

188	3223	Muscarinic acetylcholin e Receptor M1	NP_000729.1	<p>tga</p> <p>MNTSAPPAPS PNITVLAPGK GPWQVAFIGI TTGLLSLATV TGNLLVLISF KVNTLKTYN P</p> <p>NYFLSLACA DLIIGTFSMN LYTTYLLMGH WALGTACDL WLALDYVASN ASVMNLLIS</p> <p>FDRYFSVTRP LSVRAKTRPR RAALMIGLAW LVSEFLWAPA ILFWQLVGE RTMLAGQCYI</p> <p>QFLSQPIITF GTAMAAFYLP VTVMCTLYWR IYRETNRAR ELAALQGSST PGKGPGSSSS</p> <p>SERSQPGAEG SPETPPGRCC RCCRAPRLQO AYSWKDEEEE DEGSMESELS SEGEPPGSEV</p> <p>VIKMPMVDPE AQAPTQKQPR SSPNTVKRPT KKGDRAGKG QKPRGKEQLA KRKTFSLVKE</p> <p>KKAARTLSAI LLAFLITWTP YNIMVLVSTF CKDCVPETLW ELGYWLCYVN STINPMCYAL</p> <p>CNKAFRDTFR LLLLCRWDRK RWRKIPKRG SVHRTPSRQC</p> <p>atgaataact caacaaactc ctctaacaat agcctggctc ttacaagtcc ttataagaca A</p> <p>tttgaagtgg tgtttattgt cctgggtggct ggatccctca cctgacctca gtttgggtgac cattatcggg</p> <p>aacatccctag tcatgggttc cattaaagtc aacggccacc tccagaccgt caacaattac</p> <p>tttttattca gcttggcctg tgctgacctt atcatagggt ttttctccat gaacttgtac</p> <p>accctctaca ctgtgattgg ttactggcct ttgggacctg tggtgtgtga cctttggcta</p> <p>gcctggact atgtggtcag caatgcctca gttatgaatc tgctcatcat cagctttgac</p> <p>aggtacttct gtgtcacaaa acctctgacc taccagtcga agcggaccac aaaaatggca</p> <p>ggtatgatga ttgcagctgc ctgggtctctc ttttcatcc tctgggctcc agccattctc</p> <p>ttctggcagt tcattgtagg ggtgagaaact ttgttcatcc gttgggtctcc agccattctc</p> <p>ttttccaatg ctgctgtcac ctttggtagc gctattgcag ccttctattt gccagtgatc</p> <p>atcatgactg tgctatatgt gcacatatcc cgagccagca agagcaggat aaagaaggac</p> <p>aagaaggagc ctgttgccaa ccaagacccc gtttctccaa gtctgttaca aggaaggata</p> <p>gtgaaggcaa acaataacaa catgcccagc agtgacgatg gcttggagca caacaaatc</p> <p>cagaatggca aagccccag ggatcctgtg actgaaaaact gtgttcaggg agaggagaag</p>	Homo sapiens
189	3224	Muscarinic acetylcholin e Receptor M2	NM_000739	<p>atgaataact caacaaactc ctctaacaat agcctggctc ttacaagtcc ttataagaca A</p> <p>tttgaagtgg tgtttattgt cctgggtggct ggatccctca cctgacctca gtttgggtgac cattatcggg</p> <p>aacatccctag tcatgggttc cattaaagtc aacggccacc tccagaccgt caacaattac</p> <p>tttttattca gcttggcctg tgctgacctt atcatagggt ttttctccat gaacttgtac</p> <p>accctctaca ctgtgattgg ttactggcct ttgggacctg tggtgtgtga cctttggcta</p> <p>gcctggact atgtggtcag caatgcctca gttatgaatc tgctcatcat cagctttgac</p> <p>aggtacttct gtgtcacaaa acctctgacc taccagtcga agcggaccac aaaaatggca</p> <p>ggtatgatga ttgcagctgc ctgggtctctc ttttcatcc tctgggctcc agccattctc</p> <p>ttctggcagt tcattgtagg ggtgagaaact ttgttcatcc gttgggtctcc agccattctc</p> <p>ttttccaatg ctgctgtcac ctttggtagc gctattgcag ccttctattt gccagtgatc</p> <p>atcatgactg tgctatatgt gcacatatcc cgagccagca agagcaggat aaagaaggac</p> <p>aagaaggagc ctgttgccaa ccaagacccc gtttctccaa gtctgttaca aggaaggata</p> <p>gtgaaggcaa acaataacaa catgcccagc agtgacgatg gcttggagca caacaaatc</p> <p>cagaatggca aagccccag ggatcctgtg actgaaaaact gtgttcaggg agaggagaag</p>	Homo sapiens

190	3224	Muscarinic acetylcholin e Receptor M2	NP_000730.1	<p>gagagctcca atgactccac ctcaagtcagt gctgttgctt ctaatatgag agatgatgaa ataacccagg atgaaaacac agttttccact tccctgggccc attcaaaaga tgagaaactct aagcaaacat gcatcagaat tggcaccaag acccaaaaaa gtgactcatg taccaccaact aataccaccg tggaggtagt ggggtcttca ggtcagaatg gagatgaaaa gcagaatat gtagcccgca agattgtgaa gatgactaag cagcctgcaa aaaagaagcc tccctcctcc cgggaaaaaaga aagtcaccag gacaatcttg gctattctgt tggctttcat catcacttgg gccccataca atgtcatggt gctcattaac accttttgg cacttggcat ccccaacat gtgtggacaa ttgggttactg gctttgttac atcaacagca ctatcaaccc tgcctgctat gcactttgca atgcccacct caagaagacc tttaaacacc ttctcatgtg tcattataag aacataggcg ctacaaggta a</p>	Homo sapiens
191	3226	Muscarinic acetylcholin e Receptor M4	LG1143	<p>FLFSLACADL IIGVFSNLY TLYTVIGWYP LGPVVCDLWL ALDYVVSNAS VMNLLIISFD RYFCVTKPLT YPVKRTTKMA GMMIAAAWVL SFILWAPAIL FWQFIVGVRT VEDGECYIQF FSNAAVTEGT AIAAFYLPVI IMTVLYWHIS RASKSRIKKD KKEPVANQDP VPSLVQGRI VKPNNNMPS SDDGLEHNI QNGKAPRDPV TENCVQGEK ESSNDSTSVS AVASNMRRDE ITQDENTVST SLGHSKDENS KQTCIRIGTK TPKSDSCTPT NTFVEVVGSS GONGDEKQNI VARKIVMTK QPAKKKPPPS REKKVTRTIL AILLAFIITW APYVVMVLIN TFCAPCIPNT VWTIGYWLCY INSTINPACY ALCNATFKKT FKHLIMCHYK NIGATR</p>	Homo sapiens
192	3226	Muscarinic acetylcholin e Receptor M4	NM_000741	<p>ACTCTANAGG ATCCCCCCCC CTCC</p> <p>atggccaact tcacacctgt caatggcagc tggggcaatc agtccgtgag cctgggtcagc A tcatcatccc acaatcgcta tgagacggtg gaaatggtct tcaattggccac agtgacaggc tccctgagcc tggtagctgt cgtgggcaac atcctggtga tgctgtccat caaggtcaac aggcagctgc agacagtcaa caactacttc ctcttcagcc tggcgtgtgc tgatctcatc ataggcgctt tctccatgaa cctctacacc gtgtacatca tcaagggtga ctggccccctg ggcgccgtgg tctgcgacct gtggctggcc ctggactacg tggtagagcaa cgcctccgtc atgaaccttc tcatcatcag ctttgaccgc tacttctgag tcaccaagcc tctcacctac ctlgccccgc gcaccacca gatggcagcc ctcatgattg ctgctgacct ggtactgtcc ttcgtgctct gggcgccctgc catctgttc tggcagtttg tggtaggtga gcggacggtg cccgacaacc actgcttcat ccagttcctg tccaaacccag cagtacacct tggcacagcc attgctgctt tctacctgct tgtggtcatc atgacggtgc gtatcatcca catctccctg gccagtcgca gccgagtcca caagcacccg cccgagggcc tgaagagagaa gaaagccaaag acgctggcct tctcacaagag cccactaatg aagcagagcg tcaagaagcc ccgccccgga ggccgccccg gaggactgag caatggcaag ctggaggagg cccccccgcc agcgtgcca</p>	Homo sapiens

193 3226 Muscarinic NP_000732.1
acetylcholin
e Receptor
M4 Homo sapiens

ccgccaacgc gcccggtggc tgataaggac acttccaatg agtccagctc aggcagtgcc
accagaaca ccaaggaacg ccagagcaca gagctgtcca ccacagaggc caccactccc
gccatgcccg cccctccct gcagccgag gcctccaacc cagctccagc atggtccaag
atccagattg tgacgaagca gacaggaat gagtgtgtga cagccattga gattgtgcct
gccacgcccg ctggcatg cctcgccg aacgtggccc gcaagttgc cagcatcgct
cgcaaccagg tgcgaagaa gcggcagatg gcggcccg agcgaaagt gacacgaacg
atcttgcca tctgttagc ctctatctc acctggagc cctacaacgt catggtcctg
gtgaacacct tctgccagag ctgcacctt gacacggtgt ggtccattgg ctactggctc
tgctacgtca acagcaccat caacctgccc tgctatgctc tgtgcaacgc cacttttaa
aagacctcc gccacctgct gctgtgccag tatcggaaca tcggcactgc caggtag
MANFTPVNGS SGNQSVRLVT SSSHRYETV EMVFIATVTG SLSLTVVGN ILVLSIKVN P

194 3227 Muscarinic NM_012125
Acetylcholin
e Receptor
M5 Homo sapiens

atggaagggg attcttacc caatgcaacc accgtcaatg gcacccagc aaatcaccag A
ccttggaac gccacaggtt gtgggaagtc atcacattg cagctgtgac tgctgtggtg
agcctgata ccatgtgtgg caatgtcttg gtcattgatc ccttcaaaagt caacagccag
ctcaagacag ttaacaacta ttacctgtc agcttagcct gtgcagatct cateattgga
atcttctcca tgaacctcta caccacctac atctcatg gacgtgggc tctcgggagt
ctggctgtg accttggct tgcactggac tacgtggcca gcaacgttc tgctatgaac
ctctggtga tcagtttga ccgttactt tccatcacaa gaccttgac atatcgggc
aagcgtact cgaagagggc tggcatcatg attggcttgg cctggctgat ctcttcatc
ctctggccc cagcaatcct ctgctggcag tacttggttg ggaagcggac agttccactg
gatgagtgc agatccagtt tctctctgag cccaccatca cttttggcac tgccattgct
gccttctaca tccctgttc tgtcatgacc atctctact gtcgaatcta ccgggaaaca
gagaagcga ccaaggacct ggctgacctc caggttcttg actctgtgac caagctgag
aagagaaagc cagctcatag ggctctgtt agatcctgct tgcgtgtcc tgcacccacc
ctggcccagc gggaaggaag ccaggcctcc tggctcatct ccgcaggag cactccacc
actgggaagc catcccaagc cactggccc agcgcacat ggccaaaagc tgagcagctc
accacctga gcagctaccc tctctcagag gatgaggaca agcccgccac tgacctgtc
ctccaaagtg tctacaagag tcagggttaag gaaagcccag gggaagaatt cagtgtgaa
gagactgag aacttttgt gaaagctgaa actgaaaaaa gtgactatga caccctaaa
taccttctgt ctccagcagc tgcctcataga cccaagatc agaaatgtgt ggcctataag
ttccgattgg tggtaaaagc tgacgggaac caggagacca caaatggctg tcacaagggtg
aaaatcatgc cctgcccctt ccagtgggc aaggaacctt caacgaaag cctcaatccc
aaccagcc atcaaatgac caaacgaaag agagtgttcc tagtcaaga gaggaagca
gccagagac tgagtgcct tctctgtg tctcatcatca catggacccc gtataacatc

195 3227 Muscarinic NP_036257.1 Homo sapiens
 Acetylcholin
 e Receptor
 M5

atggtcctgg tttctacctt ctgtgacaag tgtgtcccaag tcacctgtg gcaattgggc
 tattggtgt gctatgtcaa tagcactgc aaccccatct gctatgacct ctgcaacaga
 acctcagga agaccttaa gatgctgctt ctctgccgat gaaaaagaa aaaagtggaa
 gagaagtgt actggcagg gaacagcaag ctacctga
 MEGDSYHNAT TVNGTPVNHQ PLEHRLWEV ITIAAVTAV SLITIVGNVL VMISFKVNSQ P
 LKTVNNYLL SLACADLIIG IFSMNLTY ILMGRWALGS LACDLWLALD YVASNASVMN
 LLVISFDYF SITRPLTYRA KRTPKRAGIM IGLAWLISFI LWAPAILCWQ YLVGKRTVPL
 DEQIQFLSE PTITFGTIA AFYIPVSMV WSSRRSTST TGKPSQATGP SANWAKAEQL
 KRKPAHALF RSCLRCRPT LAQRERNOAS ESPGEFSAE ETEETFKAE TEKSDYDTPN
 TTCSSYPSE DEDKPADPV LQVYKSQK QETNNGCHKV KIMPCFPVA KEPSTKGLNP
 YLLSPAAHR PKSQCWAYK FRLVVKADGN QETNNGCHKV KIMPCFPVA KEPSTKGLNP
 NPQHMTKRK RVLVVKERKA AQTLSAILLA FIITWTPYNI MVLVSTFCDK CVPVTLWLHG
 YWLCYVNSTV NPICYALCNR TFRKTFKMLL LCRWKKKKVE EKLYWQGNK LP

196 3378 Tachykinin NM_001059 Homo sapiens
 Receptor 3

Homo sapiens

A

ctattgcagt atctttcagc ttccagtctt atctgaagac cccggcacca aagtgaccag
 gaggcagaga agaacttcag agagctctcg tcttgggctg cccgtgggtg agtggagagg
 tccgggactg cagaccggtg gcgatggcca ctctccagc agcagaaacc tggatagacg
 ggggtggagg cgtgggtgca gacgcctga acctgaccgc ctgcctagct gccggggcgg
 ccacgggggc agttgagact ggggtggctg aactgctgga ccaagctggc aacctctctc
 cctcccttc cgcgctggga ctgcctggtg cttccccgc gccctccag cctggggcca
 actcaacca ccagttcgtg cagccgtctt ggcgcacgc gctctgttc ctggcgtatg
 ggtggtgtgt ggcagtggca gttttggga atctctatg cctctggatc atctggccc
 acaagcgcag gaggactgtc accaaactact tcttctgtga cctggcttcc tccgacgctt
 ccatggccgc ctcaaacacg ttggtcaatt tcatctacgc gcttcatagc gagtggtagt
 ttggcgcaca ctactgccg cgggtggaca ggtatatggc cagagctgtg ttcgccagca
 tctactccat gacggccatt gctacagca accaagattg tcatgggaag tatttgatt
 ccagactgtc tgctacagca cctcagtg cttatttcca aaacaaagt catgccaggc
 tacttgctt cctcagtg atgtacaccg ggtcccaaac aacattttac ttaccatatt
 gctttgtgca atggccagaa ttgttccca ttggtattac ataccatt gttggaatta
 tacttggtga ctgttccca caggagata cctgtgacaa gtatcatagc cagctaaagg
 ctctctgggg aggagaaatc ccagagata ttgtgtgcat gacatttgc atctgctggc
 ccaaaagaaa ggtgtgcaaa atgatgatta ttgtgtgcat gacatttgc atctgctggc
 tgccctatca tatttactt atctcactg caatctatca caaactaat agatggaat
 acatccagca ggtctacctg gtagctttt ggtggcaat gagtcaacc atgtacaac
 ccatactta ctgtgtctg aataaaagt ttccagctgg cttcaagaga gcaattcgct
 ggtgtcttt catcaaaagt tccagctatg atgagctaga gctcaagacc accagtttc
 atccaaaccg gcaagcagt atgtacaccg tgaccagaat ggagtcctatg acagtctgt
 ttgaccccaa cgatgcagac accaccaggt ccagtcggaa gaaaagagca acgccaagag
 acccaagttt caatggctg tctcgagga attccaaatc tgcctccgc acttcaagt
 tcataagctc acctatacc tctgtggatg aatatttcta attcatttc ctgaggtaaa
 agattagtgt gagaccatca tgggtccagt ctaggacccc attctctat ttatcagtc
 tgtcctatat acctctaga aacagaaagc aatttttagg cagctatggt caaattgaga

197	3378	Tachykinin Receptor 3	NP_001050.1	<p>aaggtagtgat ataaatgtga caaagacact aataacatgt tagcctccac ccaaaataaa atgggcttta aattt</p> <p>MATLPAAETW IDGGGVCAD AVNLTASLAA GAATGAVETG WLQLLDQAGN LSSSPSALGL P PVASPAPSQP WANLTNQFVQ PSWRIALWSL AYGVVAVAV LGNLIVII LAHKRMRTVT NYFLVNLAFS DASMAAFNTL VNFYIALHSE WYFGANYCRF QNFFPITAVF ASIYSMTAIA VDRYMAIIDP LKPRLSATAT KIVIGSIWIL AFLAFPOQL YSKTKVMPGR TLCFVQWPEG PKQHFTYHII VIILVYCFPL LIMGITYTIV GITLVGGEIP GDTCKYHEQ LKAKRKVVKM MIIIVMTFAI CWLPYHIYFI ITAIYQQLNR WKYIQVYLA SFWLAMSSTM YNPYIYCCLN KRFRAGEFKRA FRWCPIKVS SYDELELKT RFHPNRQSSM YTVTRMESMT VFDPNDADT TRSSRKKRAT PRDPSENGCS RNKSASAT SSFISSPYTS VDEYS</p>	Homo sapiens
198	3380	Neuromedin B Receptor	NM_002511	<p>gtgctgtgag gcttgcgcgc ggacagtaaa ctctgcaggg cgagagggag ggacatcgat A taaacctaaa tctgtggggt tcaagtctca gggcaccgag cgctgaaaa ctccagcgga ctctgctgga agggagatca tgcctcttaa gtctcttcc aacctctcg tgaccaccgg cggaatgag agcggttccg ttcccgaggg gtgggaaagg gatttctgc cggcctcgga cgggaccacc acggagtgg tgatccgctg tgtgatccc tccctctacc tgctcatcat cacctgggc ttgctggga acatcatgct ggtgaagatc ttcatcacca acagcgccat gaggagcgtc cccaacatct tcatctctaa cctggcgcc ggggactgc tgctgtgct cacctgcgtc cgggtggag cctgcgcta cctcttcgag gattggatgt ttggcaaggt gggtgcaaa ctgattccctg tcatccagct cacttccgtg ggggttccg tgttcaactc cactgcctc agcgccgaca ggtacagagc catcgtaac cccatggaca tgcagacgtc agggcattg ctgcggacct gtgtgaaggc catgggtatc tgggtggtct cegtgtgct ggcagttccc gaagcgggtg ttccagaagt ggtcgcgc atagcttgg ataatagcag cttcacagca tgtatcccat acctcaaac agatgaatta catccaaaga ttcattcaagt gtcattttc ttggtctatt tctcatacc acttgctatt attagcattt attattatca tattgcaaa accttaatta aaagcgaca caatcttctt ggagaatata atgaacatac caaaaaacag atggaaacac gaaacgcct ggctaaaatt gtgcttctt tctggtggctg tttcatcttc tgttggttcc caaacacat cctttacatg tatcgtgctt tcaactataa tgagattgat ccatctctag gccacatgat tgtcacctta gttgcccggg tctcagttt tggcaattct tgtgtcaacc catttgctct ttacctactc agtgaaggct tcaggaggca tttcaacagc caactctgct gtggaggaa gtccctatcaa gagagaggaa ccagctacct actcagctct tcagcgggtg gtatgacatc tctgaaaagc aatgctaaga acatggtgac caattctgtt ttactaaaatg ggcacagcat gaagcaggaa atggcaatgt gatttggcc attcaactca ctacctggag agaacttagt aa</p> <p>MPSKSLNLS VTTGANESGS VPEGWERDFL PASDGTTEL VIRCVIPSLY LLIITVGLLG P NIMLVKIFIT NSAMRSVPNI FISNLAAGDL LLLTTCVPVD ASRYFFDEWM FGKVGCKLIP VIQLTSVGS VFTLTALSAD RYRAIVNPMD MQTSGALLRT CVKAMGIWV SVLLAVPEAV FSEVARISL DNSSTACIP YPQDELHPK IHSVLIFLVY FLIPLAISI YYHIAKTLI KSAHNLPGY NEHTKKQMET RKRLAKIVLV FVCGFICWF PNHILMYRS FNYNEIDPSL GHMIVTLVAR VLSFGNSCVN PFALYLSES FRHFNSQLC CGRKSQERG TSYLLSSSAV RMTSLKSNK NMVTNSVLLN GHSMKQEMAM</p>	Homo sapiens
199	3380	Neuromedin B Receptor	NP_002502.1	<p>attcaactca ctacctggag agaacttagt aa</p> <p>MPSKSLNLS VTTGANESGS VPEGWERDFL PASDGTTEL VIRCVIPSLY LLIITVGLLG P NIMLVKIFIT NSAMRSVPNI FISNLAAGDL LLLTTCVPVD ASRYFFDEWM FGKVGCKLIP VIQLTSVGS VFTLTALSAD RYRAIVNPMD MQTSGALLRT CVKAMGIWV SVLLAVPEAV FSEVARISL DNSSTACIP YPQDELHPK IHSVLIFLVY FLIPLAISI YYHIAKTLI KSAHNLPGY NEHTKKQMET RKRLAKIVLV FVCGFICWF PNHILMYRS FNYNEIDPSL GHMIVTLVAR VLSFGNSCVN PFALYLSES FRHFNSQLC CGRKSQERG TSYLLSSSAV RMTSLKSNK NMVTNSVLLN GHSMKQEMAM</p>	Homo sapiens

200	3404	Neuropeptide Y Receptor Type 2	NM_000910	Homo sapiens

201	3404	Neuropeptide NP_000901.1 Y Receptor Type 2	<p> ggctcacaag tgaataactga ttcccatatt taaagaagaa gtggatctaa atggaagcat ctgctgttta attcctggaa aactggctgg gcagagcctg tgtgaaataa ctggaattca aagataaagg aacaaaatgg ttacttaac agttggttg gtagtaggtt gcattatgag taaaagcaga gagaagtact ttctgattatt ttctggagt gaagaaact tgaacaagaa attggtatta tcaagcatt gctgagagac ggtgggaaaa taagttagct tcaaatcac gttaggacct ggattgagga ggtgtgcagt tgcgtgctcc ctgcttggt tatgaaaaa ccactgaaca gaaatttctc caggagcca caggctctcc ttcatcgcat ttgtatttt ttgttcattc tctagacaaa atccatcagg gaatgctgca ggaacgatt gccaaactata cgaatggctt cgaggagata aactgaaatt tgctatatata ttaatatattt ggcagatgat agggaactc ctcaacactc agtgggcaa ttgttcttaa aaccaattgc acgtttggtg aaagtctctt caactctgaa tcaaaagctg aaattctcag aattacagga aatgcaaac atcatttaat ttctaatttc aagttacatc cgctttatgg agatactatt tagataacaa gaatacaact tgatactttt attgttatac ctttttgaa atgtatgatt tctgttgta tttacctttt taaacagata aatattttt ttctatttta gtagtagcga atctaattt aatctaactt tttagagta tatttcagag aaattccaag cacaccagta tgaccatct tatttcagaa atgacaatgc atagaggaaa agtaatatgt gcaaacctc cgaagaggat ggttaagtaa agacttagt taccagtac aggttttgt tttgtatgt agtagctct actgctcct cttaaaacca acaaaaggaa gagagctgg ctgcaaacct ttagaaggaa tggcttcgaa tagggttctt gggaggatc cggaggaaat agacgtgct gctctgctga ttgtctccac tctctgttt tgctctacc cactaatcca gcctgggagg ctctgggcat tagcggaagg cttaccaca aggagacagg agcagatatt ccataggcat gcgtcctag tggcacgagt ggcttgggtc agtatcaaag agtgaaggat tcggaagtca gctatctgga gagagagaga gattgtgttt tattcgtgc ccatagcttt cctatcctat cctatccta gcttttaacc tgagccagag ctactacac aggttctctgg ctatcgagtc tgaatctgca ctactcaact tataaactgt ctgcagacac ctgttaggga aattgctgat catgggcggc aggatctgaa ctgcttttac ctcttggtt ggagcacagg gaccgcccag ctgagaggagc accagcgac tgcgccccag ccctgggga ttctgctgg atccagctcc ccatctctgc tctacacac ctgctggcgc ttttccgggg ttctgctgg aggtgaggag gatttgttct cgggtgcaatc acaaagaaa acaactctcg attggaagt gtggaatttt ctacgcccc acgagggcg gggattctcc agccccggcc ctctcccg cagcctgagg tctctctgc tgcctgctc tgctagggac cgcagtcctt cagcgcagc tgggtctgtc cgcctcctc ttgcccctgc ctttcccg ggcgatttg gtgaagtctg cctcaagtcc aggaggtctg tcttcgccc gccagctctc </p>	<p> Homo sapiens </p>
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202	3405	Neuropeptide Y Receptor Type 4	NM_005972	atgaacaccc ctcacacctc tgggaccccc atacaacttc ggccttgctg ctcccaaat ctccacaagg tgaaaaacaga A	Homo sapiens
				agcaaacccc tgggaccccc atacaacttc tctgaacatt gccagattc cgtggacgtg	
				atggctcttca tctgctacttc ctacagcatt gagactgtcg tgggggtcct ggttaacctc	
				tgcttgatgt gtgtgactgt gaggcagaag gagaaagcca acgtgaccaa cctgcttatac	
				gccaacctgg ccttctctga cttctctctg tgcctcctct gccagccgtc gaccgcccgtc	
				tacaccatca tggactactg gatcttttga gagaccctct gcaagatgtc ggccttcctc	
				cagtgcattg cggtagcgtt ctccatcttc agctctgctc tctgtggcct ggagaggcat	
				cagctcatca tcaacccaac aggtctgaag ccagcagctt cccagcccta cctggggatt	
				gtgctcatct gggctattgc ctgtgtcttc tccctggcct tccctggcaa cagcatcctg	
				gagaatgtct tccacaagaa ccaactccaag gctctggagt tccctggcaga taagggtgtc	
				gtaccgagt cctggccact ggctcaccac cgcaccatct acaccacctt cctgctcctc	
				ttccagttact gctccactt gggcttcctc ctggtctgtt atgcacgcat ctaccggcgc	
				ctgcagaggc aggggcgcgt gtttcacaag ggcacctaca gcttgcgagc tgggcacatg	
				aagcagggtca atgtgggtgt ggtgggtgat ggtgtggcct ttgcccgtct ctggctgcct	
				ctgcatgtgt tcaacagcct ggaagactgg caccatgagg ccatccctcc ctgccacggg	
				aacctcatct tcttagtgtg ccacttgctt gccatggcct ccactgcgt caacccttc	
				atctatggct tctcaacac caacttcaaag aaggagatca aggccctggt cctgactgtc	
				cagcagagcg cccccctgga ggagtggag catctgcccc tgtccacagt acatacggaa	
				gtctccaaag ggtccctgag gctaaagtcg aggtccaatc ccatctaa	
203	3405	Neuropeptide Y Receptor Type 4	NP_005963.1	MNTSHLLALL LPKSPQGENR SKPLGTPYF SEHCQDSVDV MVFIVTSYI ETVVGVLGNL P	Homo sapiens
				CLMCVTVRQK EKANVTNLLI ANLAFSDFLM CLLCQPLTAV YTIMDYWIFG ETLCKMSAFI	
				QCMSVTVSIL SLIVVALERH QLIINPTGWK PSISQAYLGI VLIWVIACVL SLPLFANSIL	
				ENVEHKNHSH ALEFLADKW CTESWPLAHH RTIYTFELL FQYCLPLGFI LVCYARIYRR	
				LQROGRVFHK GTYSLRAGHM KQNVVVLVVM VVAFVILWLP LHVFNLSLEW HHEAIPICHG	
				NLIPLVCHLL AMASTCVNPF IYGFNTNFK KEIKALVLTQ QQSAPLESE HPLSTVHTE	
				VSKGSLRLSG RSNPI	
204	3406	Neuropeptide Y Receptor Type 5	NM_006174	gaaaggctat cggtaacaac tgacctgcca caaagttaga agaaaggatt gattcaagaa A	Homo sapiens
				agactataat atggatttag agctcgacga gtattataac aagacacttg ccacagagaa	
				taatactgct gccactcgga attctgattt ccagtcctgg gatgactata aaagcagtg	
				agatgactta cagtatttct tgattgggct ctatacattt gtaagtcttc ttggctttat	
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				cttctcata ggaactctgg ccttttctga tatcttgggt gtgctgtttt gctcaccttt	
				cacactgacg tctgtcttgc tggatcagtg gatgtttggc aaagtcatgt gccatattat	
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				atgtgttgag tcatggccat ctgattcata cagaattgcc tttactatct ctttattgct	
				agttcagtat atctggcct tagtttgtct tactgttaagt catacaagt tctgcagaag	
				tataagctgt ggattgtcca acaagaaaaa cagacttgaa gaaaatgaga tgatcaactt	
				aactcttcat ccatccaaa agagtgggc ttagtgaaa ctctctgga gccataaatg	

205	3406	Neuropeptide Y Receptor Type 5	NP_006165.1	gagttattca ttcatcaaaa aacacagaag aagatatagc aagaagacag catgtgtgtt acctgctcca gaaagacctt ctcaagagaa ccaactccaga atacttccag aaaactttgg ctctgtaaga agtcagctct ctcatccag taagtccata ccagggttcc ccacttgcct tgagataaaa cctgaagaaa attcagatgt tcatgaattg agagtaaac gtctgtgtac aagaataaaa aagagatctc gaagtgtttt ctacagactg accatactga tattagtatt tgctgttagt tggatgccac tacacctttt ccatgtggtg actgatttta atgacaatct tatttcaaat aggcatttca agttgtgtga ttgcatttgt cattgttgg gcatgatgtc ctgtgtctt aatccaattc tatatgggtt tcttaataat gggattaaag ctgatttagt gtcccttata cactgtcttc atatgtaata attctcactg ttt MDLELDEYN KTLATENNTA ATRNSDFPV DDYKSSVDDL QYFLIGLYTF VSLLGFMGNL P LILMALMKR NQKTTNFI GNLAFFDILV VLFCSPTLT SVLLDQMMFG KVMCHIMPFL Homo sapiens
206	3408	Neurotensin Receptor Type 1	NM_002531	QCVSVLVSTL ILISIAIVRY HMIKHPISNN LTANHGIFYLI ATVWTLGFAL CSPLPVEFHS VELQETGSA LLSSRYLCVE SWPSDSYRIA FTISILLVQY ILPLVCLTVS HTSVCRSISC GLSNKENRLE ENEMINLTIL PSKSGPQVK LSGSHKWSYS FIKKHRRYS KKTACVLPAP ERPSQENHSR ILPENFGSVR SQLSSSSKFI PGVPTCFEIK PEENSVDVHEL RVKRSVTRIK KRRSVFYRL TILILVEAVS WMLHLFHV TDFENDNLISN RHFKLVYCIC HLLGMMSCC NPILYGLFNN GIKADLVSLI HCLHM tcaagctcgc ccgcgcagc ccgagccggg ctggggcgctg tcttcggggg cctggggaac A cgcgcggttt ggagatcgga ggcacctgga acccgtggca agcgcggagc cgggagacag ccgaggaac caggggttct ggagtagga gccgaagct gggagtcgg aggagacggg agccggagc ccggagcccg gggcgcgcg tctgggtctg gcgttcccg actggacggc gcgcccgtg gtcttcgcca cgcgccctcc cctgggctcg cgttcactcg tcccgccctg agacgcgcc actcctgcct ggacttccag ccccgaggcg gccggagaca gccgcggact ccagcgccca ccctgcgct caacagctcc gcgcgggaa ccccgggcac gccggccgccc gaccccttc agcggggcgca gcccgagctg gaggagcgcg tctggggccc gggcttcggc aacgcttcgg gcaacgcgtc ggagcgctc ctggcgccac ccagcagcga gctggacgtg aacaccgaca tctactccaa agtgcgtgtg accgctgtg acctggcgct ctctgtggtg ggcacggtg gcaacacggt gacggcgctt acgctggcg ggaagaagtc gctgcagagc ctgcagagca cgggtgcatta ccacctggg agcctggcg tctccacct gctccacctg ctgctggcca tggcgtgga gctgtacaac ttcactctgg tgcaccacc ctgggcccctc ggcgacgccc gctgcgccc gctactctc ctgcgcgac cctgcaacta cgcacagggc ctcaacgtg ccagcctgag tctggagcgc tacctggcca tctgcaacc ctcaaggcc aagacctca tgtcccgaag ccgcaccaag agtttcata gcgccatctg gctgcctcg gcccgtgta cgggtcctat gctgttcacc atggcgagc agaaccgag gccgcagggc cagcacgccc gggcctggt gtgaccccc accatccaca ctgccacct caaggtcgtc atacaggtca acaccttcac gtccttcata tccccatgg tggctatctc ggtcctgaac accatcatcg ccaacaagct gaccgtcatg gtacgccagg cggccagaca gggccaagt tgacaggtcg gggcgagca cagcacatc agcatggcca tcgagcctgg cagggtccag gcccgtggc acggcgtag cgctcactg gcagtggtca tgcctttgt ggtcgtggtg ctgcccacc acgtgcggcg cctcatgttc tgctacatct cggatgagca gtggactccg ttctctatg acttctacca ctacttctac atggtgacca acgactctt ctacgtcagc

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taatttctga gctcgggtt ccccatctaa ggaacagatg tggctgttcc gccctctcag
ctggatgaga ctgtccttga ggtccacccc cggaaacagc agaacggtgt cctcaggat
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gtctctgggg cggggtctgt ggtgtgact gaagtgggt tcccgttga tgtcttgatg
ctctatctg tgcattacc gtaggtaggg acagtgctc atgcaccaca gacacacca

207	Neurotensin Receptor Type 1	NP_002522.1	cgacacctga tctcgtatca ctagcttgcc gccaggtcat gatgtggccc cggaagctgg ccctgcgtgc catgagtgcc tccgtcatgg agtccggagg cccctgagccg gcccctgggtg acggcacagc cctcacagct caaacgccc ccccaactcc caccatctgc aggtggtgaa aacaacccc ggtatctct caataaaggt ggccgaagg cctcgatgtg g MRLNSSAPGT GGTAAADPFQ RAQGLEAL LAPGFGNAG NASERVLAAP SSELVNTDI P YSKVLVTAVY LALFVGVTVG NTVTAFTLAR KKSLSQSLST VHYHLSLAL SDLLTLLAM PVELYFIWV HHPWAFGDAG CRGYFLRDA CTYATALNVA SLVERYLAI CHPEKAKTLM SRRTKKFIS AIWLASALT VPMLFTMGEO NRSADQOHAG GLVCTPTIHT ATVKVVIQVN TMSFIIPMV VISVLNTIIA NKLTVMVRQA AEQGVCTVAG GEHSTFMAI EPGRVQALRH GVRVLRWVI AFVVCWLPYH VRRLMFCYIS DEQWTFELVD FYHYFYMVTN ALFYVSSSTIN PILYNLVSAN FRHIFLATLA CLCPWRRRR KRPAFSRKAD SVSSNHTLSS NATRELY cctgctctgc acctgctgc gactgccagc cggctgaggg cgggggtctc cactgtggtc A ccagctccca agagaggtgc agaagtaccg tacagagtgg atttgcagg cagtggcatg gagccctct tccccgcc gttctggag gttatctac gcagccacct tcagggcaac ctgtccctcc tgagcccaa ccacagtctg gtgcccgc atctgctgt caatgccagc caggcgctc tctgcccct cgggctcaa gtcaccatg tggggtcta cctggccgtg tgtgtcggag ggctcctggg gaactgcctt gtcattgtac tcactcctcag gcacacaaa atgaagacag ccaccaatat ttacatctt aactggccc tggccgacac tctggtcctg ctgacgtgc cctccaggg caggacatc cctctgggt cctggcgtt tgggaatgcg ctgtgcaaga cagtattgc cattgactac tacaacatgt tcaccagcac ctacacctc actgccatga gtgtggatcg ctatgtagcc atctgccacc ccatccgtgc cctcgacgtc cgacagtcca gcaaaagccc gctgtcaat ttggccatct ggccctggc cctctgtgtc gggttcccg ttgccatcat gggtcggca caggtcgagg atgaagat cgagtgcctg gtggagatcc ctacccctca ggattactgg gcccgggtgt ttgccatctg catcttctc ttctcctca tctgcccgt gctgctc tctgtctgt acagcctcat gatccggcgg ctccgtggag tccgctgct ctcgggctcc cgagagaagg accggaacct gcggcgcatc actcggctgg tgctggtgt agtggctgtg ttctgtgggt gctggagccc tgtccaggtc ttcgtgctgg cccaagggt gggtgttcag ccgagcagcg agactgccc ggccattctg cgcttctgca cggccctggg ctacgtcaac agctgcctca acccatcct ctacgccttc ctggatgaga acttcaaggc ctgctccgc agttctgtgt gtgcattctg cctgcgcgg gacgtgcagg tctctgacc cgtgcgcagc attgccaagg acgtggccct ggccgtgcaag acctctgaga cgttaccgc gccgcatga ctaggcgtgg acctgcccct ggtgctgtc agccgcaga gccatctac gcccaacaca gagctcacac aggtcactgc tctctaggcg gacacacct ggccctgag catccagagc ctgggatggg cttttccctg tggccaggg atgctcggtc ccagaggagg acctagtac atcatgggac aggtcaaacg attaggcca cctccatggc ccagacaga cttaagctgc cctcctgggt caggcccgag gggacacaag gacctacctg gaagcagctg acatgctggt ggacggcctg tactggagcc cgtgcccctc cctccccgtg ctctatgta ctttggcct cctctgtgt gcttggcag aacctgggt gggcaggcac ccggaggagg agcagagct tgcctacct gtgccccca tgtgctgtgt gctgtttgca tggcagggt ccagctgcct tcaggccctg gactctcct caggcagct ggacaggctt ggcacggccc gggaagtga gcaggcagct ttcttttggg gtgggacttg	Homo sapiens
208	Opiate Receptor- Like 1 (OPRL1)	NM_000913	cctgctctgc acctgctgc gactgccagc cggctgaggg cgggggtctc cactgtggtc A ccagctccca agagaggtgc agaagtaccg tacagagtgg atttgcagg cagtggcatg gagccctct tccccgcc gttctggag gttatctac gcagccacct tcagggcaac ctgtccctcc tgagcccaa ccacagtctg gtgcccgc atctgctgt caatgccagc caggcgctc tctgcccct cgggctcaa gtcaccatg tggggtcta cctggccgtg tgtgtcggag ggctcctggg gaactgcctt gtcattgtac tcactcctcag gcacacaaa atgaagacag ccaccaatat ttacatctt aactggccc tggccgacac tctggtcctg ctgacgtgc cctccaggg caggacatc cctctgggt cctggcgtt tgggaatgcg ctgtgcaaga cagtattgc cattgactac tacaacatgt tcaccagcac ctacacctc actgccatga gtgtggatcg ctatgtagcc atctgccacc ccatccgtgc cctcgacgtc cgacagtcca gcaaaagccc gctgtcaat ttggccatct ggccctggc cctctgtgtc gggttcccg ttgccatcat gggtcggca caggtcgagg atgaagat cgagtgcctg gtggagatcc ctacccctca ggattactgg gcccgggtgt ttgccatctg catcttctc ttctcctca tctgcccgt gctgctc tctgtctgt acagcctcat gatccggcgg ctccgtggag tccgctgct ctcgggctcc cgagagaagg accggaacct gcggcgcatc actcggctgg tgctggtgt agtggctgtg ttctgtgggt gctggagccc tgtccaggtc ttcgtgctgg cccaagggt gggtgttcag ccgagcagcg agactgccc ggccattctg cgcttctgca cggccctggg ctacgtcaac agctgcctca acccatcct ctacgccttc ctggatgaga acttcaaggc ctgctccgc agttctgtgt gtgcattctg cctgcgcgg gacgtgcagg tctctgacc cgtgcgcagc attgccaagg acgtggccct ggccgtgcaag acctctgaga cgttaccgc gccgcatga ctaggcgtgg acctgcccct ggtgctgtc agccgcaga gccatctac gcccaacaca gagctcacac aggtcactgc tctctaggcg gacacacct ggccctgag catccagagc ctgggatggg cttttccctg tggccaggg atgctcggtc ccagaggagg acctagtac atcatgggac aggtcaaacg attaggcca cctccatggc ccagacaga cttaagctgc cctcctgggt caggcccgag gggacacaag gacctacctg gaagcagctg acatgctggt ggacggcctg tactggagcc cgtgcccctc cctccccgtg ctctatgta ctttggcct cctctgtgt gcttggcag aacctgggt gggcaggcac ccggaggagg agcagagct tgcctacct gtgccccca tgtgctgtgt gctgtttgca tggcagggt ccagctgcct tcaggccctg gactctcct caggcagct ggacaggctt ggcacggccc gggaagtga gcaggcagct ttcttttggg gtgggacttg	Homo sapiens

209	3452	Opiate Receptor- Like 1 (OPRL1)	NP_000904.1	<p>ccctgagctt ggagctgcca cctggaggac ttgcctgttc cgactccacc tgtgcagccg gggccacccc aggagaaagt gtccaggtgg gggctggcag tccctggctg cagaccccga gctggccctc ggaccgcacc tctgaaggtt tctgtgtgc tgcacggctg aggcctcatc cctgactgca gcttgactct gggcccaacc cccatttccc ttcaggagac cagcgagagg ccctggccat ccctccagcg gtgcaatgaa ctatatgccc tggaccgtca accagccct gctctcagt gtggggcagg tgtctcagga cgaaggcgcc gctgaccac atgggcagct ctgttcacaa agtggaggcc tegtctctt ggtcttgact gctctgttg ggtgggagaa gattctctgg ggtccccac atctctccaa ggtccccctc acagcctctc ctttgcttga agccagaggt cagtggccgt gctgtgttg ggggaagctg tgtggaagga gaagctgggtg gccacagcag agtcctgctc tggggacgcc tgcctcattt acaagcctca agatggctct gtgtagggcc tgagcttgct gcccaacggg aggatggctt cacagcagag ccagcatgag gggtggggcc tggcagggt tgcctgagcc aaactgcaa ggctgtggtg gctgtgagga cactgcgggg gttg</p>	Homo sapiens
210	3513	Ocular Albinism 1 (Nettleship- Falls) (OAL)	NM_000273	<p>MEPLFPAPFW EVIYVILRHT KMKTATNIYI FNALADTLV LLTLPQGTD ILLGFWPFGN VCVGGLLGNC LVMYVILRHT KMKTATNIYI FNALADTLV LLTLPQGTD ILLGFWPFGN ALCKTVIAD YNMFTSTFT LTAMSVDRYV AICHPIRALD VRTSSKAQAV NVAIWALASV VGVPVAIMGS AQVEDEEIEC LVEIPTQDY WGPVFAICIF LFSFIVPVLV ISVCYSLMIR RLRGVRLLSG SREKDRNLRR ITRLVLVVA VFVGCWTPVQ VFVLAQGLGV QPSSETAVAI LRFCTALGYV NSCLNPILYA FLDENFKACF RKFCASALR RDVQVSDVR SIADVALAC KTSETVPRPA</p>	Homo sapiens
				<p>atgaccacag caggccggcg gggctctggc acaccggagc cggctccgag aacacagccc A atggccctcc cgcgcctagg gaccttctgc tgccccacgc gggacgcagc cagcagctc gtgtgagct tccagccgcg ggccttccac gcgctctgc tgggcagcgg cgggtccgc ttggcgctgg gccttctgca gctgctgccc ggcgcgcggc cgcggggccc cgggtccccc gcgacgtccc cgcggccctc ggtccgcac ctgcgcgctg cgcgtgcctg cgacctctc ggctgcctgg gtatgtgat ccggtccacc gtgtggttag gattcccaaa tttgttgac agcgtctcgg atatgaacca caggaaatt tggcctgctg ctttctgctg ggggagtgcg atgtggatcc agctgttgta cagtgcctgc ttctggtggc tgttttgcta tgcagtggt gcttatctgg tgatccggag atcggcagga ctgagcacca tccgtctgta tcacatcatg gcgtggggcc tggccacctt gctctgtgtg gaggagccg ccatgctcta ctaccttcc gtgtccaggt gtgagcgggg cctggaccac gccatccccc actatgtcac catgtacctg ccccgtgc tggttctcgt ggcgaacccc atcctgttcc aaaagacagt gactgcagt gcctctttac ttaaaggaa acaaggcatt tacacggaga acgagaggag gatgggagcc gtgatcaaga tccgattttt caaaatcatg ctggttttaa ttatttgggt gttgtcgaat atcatcaatg aaagcctttt attctatctt gagatgaaa cagatatcaa tggaggttct ttgaaacctg tcagaactgc agccaagacc acatgggtta ttatgggaat cctgaatcca gcccagggat ttctctgtc ttggccttc tacggctgga caggatgcag cctgggtttt cagtcctcca ggaaggagat ccagtgggaa tccactgacca cctcggctgc tgagggggct caccatccc cactgatgcc ccatgaaaac cctgcttccg ggaagggtgc tcaagtgggt gggcagactt ctgacgaagc cctgagcatg ctgtctgaag gttctgatgc cagcacaatt gaaattcaca ctgcaagtga atcctgcaac aaaaatgagg gtgacctgc tctcccaacc</p>	Homo sapiens

211	3513	Ocular Albinism 1 (Nettleship- Falls) (OAI)	NP_000264.1	catggagacc tatgaagg999 atgtgctg99 ggtccagacc ccatattcct cagactcaac aattcttggt ctttagaact gtgttctcac cttcccaaca ctgcactgcc gaagttagc ggccccaaa ccttgctctc ataccagct agagcttctt cccgaaggcc ctttaggata ggagaaagg99 ttcattgaca cactgtgag aatggaagag cccctccag accactctac agctgctcta gccttagtg cactaggaa gtttctgag ctggctgta aagtaagtgt aaggtccaca tccttg999 agtagtaaa taaaatagtt atgactg MTQARRRPG TPEPRPTQP MASPRLGTF CPTDRATQL VLSFQPAFH ALCLSGGLR P LALGLLQLLP GRRPAGPSF ATSPASVRI LRAAAACDL GCLGMVIRST VMLGFPNFVD SVSDMNHTEI WPAAFVCVSA MWIQLLYSAC FWLFCYAVD AYLVIRRSAG LSTILLYHIM AWGLATLLCV EGAAMLYPS VSRCEGLDH AIPHYVTMYL PLLLVANP ILFQKTVTAV ASLLGRQGI YTENERMGA VIKIRFFKIM LVLIICWLSN IINESLLFYL EMQTDINGGS LKPVRTAAKT TWFMGILNP AQGLLSLAF YGWTGCSLGF QSPRKEIQWE SLTTSAAEGA HPSFLMPHEN PASGKVSQVG GQTSDEALSM LSEGSDASTI EIHTASESCN KNEGDPALPT HGDL	Homo sapiens
212	3544	UDP-glucose Receptor (KIAA0001)	NM_014879	gaacagtgtt acctggagc ctacaatgag aggtatttca aatgagtgga agcatgactc A tcacagatga aggcctagac gcagatctt taatggaaaa acacttgggc cacttcaaga cgacaaacgc tcactggga aaacaccttc actgaaaaa gacctcatat tatgcaaaaa aaatcttaag aggcctctgc ctcaagaagt tacaagatga tcaattcaac ctccacacag cctccagatg aatcctgctc tcagaacctc ctgacactc agcagatcat tccctgtgctg tactgtatgg tcttcattgc gggaatccta ctcaatggag tgtcaggatg gatattcttt tacgtgcca gctctaagag ttcatcatc tatctcaaga acattgttat tgcgacttt gtgatgagcc tgacttttcc ttcaagatc ctgtgtgact caggccttgg tccctggcag ctgaacgtgt ttgtgtgag gtctctgccc agtctcttct acgtcaacat gtacgtcagc attgtgttct ttgggctcat cagctttgac aggtattata aaattgtaaa gcctcttgg acttcttcca tccagtcagt gattacagc aaacttctgt cagtgtatg atggtgctc atgctcctcc ttgctgttcc aaatattatt ctacccaacc agagtgttag ggaggttaca caataaaaa gtatagaact gaaaagtga ctgggacgga agtggcaca agcatcaaac tacatcttcg tggccatctt ctggattgtg ttcttcttct taatcgttt ctatactgt atcacaaaga aaatctttaa gtcccacctt aagtcaagtc ggaattccac ttcggtcaaa agaaaatcta gccgcaacat attcagcatc gtgtttgtgt ttttgtctg tttgtacct taccatattg ccagaatccc ctacacaaag agtcagaccg aagctcata cagctgccag tcaaaagaaa tcttgcggtat tatgaaagaa ttcactctgc tactatctgc tgcaaatgta tgcttgacc ctattattta ttcttctcta tgcagccgt tatgggaaat cttatgtaag aaattgcaca ttccattaaa agctcagaat gacctcaga tttccagaat caaaagagga atacaaacac ttgaagcac agatactttg tgagttccta cctcttcca aagaaagacc acgtgtgcat gttgtcatc tcaattacat aacagaaatc aataagatat gtgccctcat cataaatatc atctctagca ctgccatcca atttagttca ataaaattca aatataagt tccatgcttt tttgtaacat caaagaaaac ataccatca gtaatttctc taatactgac cttctattc tctattaata aaaaattaat acatacaatt attcaattct attatattaa aataagttaa agttataac cactagtctg gtcagttaat gtagaaattt aaatagtaaa taaaacacaa cataatcaaa gacaactcac tcaggcatct tcttctcta ataccagaa	Homo sapiens

213	3544	UDP-glucose Receptor (KIAA0001)	NP_055694.1	<p> tctagtatgt aattgttttc aacactgtcc ttaaagacta acttgaaagc aggcacagtt tgatgaagg gtagagagct gttgcaata aaaagtcagg ttttttccct gatttgaaga agcaggaaaa gctgacaccc agacaatcac ttaagaacc ccttattgat gtatttcattg gcactgcaaa ggaagaggaa tattaattgt atacttagca agaaaatttt ttttttctga tagcaccttg aggatattag atacatgcta aatattgttt ttaaaagac ttacgtcatt taatgagcct ggggttctgg tgttagaata tttttaagta ggccttactg agagaaacta aatattggca tacgttatca gcaacttccc ctgttcaata gtatgggaaa aataagatga ctgggaaaaa gacacaccca caccgtagaa catatatata tctactggcg aatgggaaaag gagaccattt tcttagaaaag caaataaact tgattttttt aaatctaaaa ttacattaa tgagtgcata ataacacata aatgaaaaat tcacacatca catttttctg gaaaaacagac ggattttact tctggagaca tggcatacgg ttactgactt atgagctacc aaaactaaat tcttttctctg ctattaaactg gctagaagac attcatctat ttttcaaatg ttctttcaaa acatttttat aagtaaatgt tgtatctatt tcatgcttta ctgtctatat actaataaag aaatgttta atactg </p>	Homo sapiens
214	3582	Oxytocin Receptor	NM_000916	<p> MINSTSTQPP DESCQNLLI TQQLIPVLYC MVFIAGILLN GVSQWIFFYV PSSKSFIIYL P KNIVIADEFM SLTFPFKILG DSGLGFWQLN VFVCRVSAVL FYVMYVSIV FFGLISFDRI YKIVKPLWTS FIQSVSYSL LSVIVWMLML LLAVPNIILT NQSVREVTQI KCIELKSELG RKWKASNYI FVAIFWIVFL LLIVFYTAIT KKIFKSHLKS SRNSTSVKKK SSRNIFSIVF VFFVCFVPYH IARIPYTKSQ TEAHYSCQSK EILRYMKEFT LLJSAANVCL DPIIYFFLCQ PFREILCKKL HIPLKAQNDL DISRIKRGNT TLESTDL </p>	Homo sapiens
				<p> ctccggagg gtcgtgcgg A agcctcagcc ccaggcacag cgctcctcgc tcgctcctg caaccgagcc tccagtga atcccaactc gggccggag ccggggggag tcaactttag cccgaggaaac tggcacgctg ttgcagtggc tcagaggagg agccccgggc gccctacac aaagggtctg aaggccggg ccaaactggag cgccgaggca gcaccgccc acccccgcg gtctcctcgc gctcctggcg cagccagaa gcactcgcg ctgcgcacca gactcgcg gaggtggcag ttctcaggtg ggccccgacct gctgtgcgc cctacctgct gctgtcctg cgctgcgcg ccgcaccgac ccagcgccg ccagggtgac gctggggcct cttcatccag ctgtctacat cgtgcggg </p>	

atcgtgctcg ctacctgcta cggccttata agcttcaaga tctggcagaa cttgcggtc cttgcggtc
aagaccgtg cagcgaggc ggcgagggc ccagagggcg cggcggtcg cgtatggggg
cgcgtggccc tggcgcgtg cagcagcgtc aagctcatc ccaaggccaa gatccgcacg
gtcaagatga ctttcatcat cgtgctggc tgcctcgtg agcctcgcc tttcttcttc
gtgcagatgt ggagcgtctg ggatgccaac gcgcccagg aagcctcgcc cttcatcacc
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ggcaacctct tccacgaact cgtgcagcgc ttcctgtgct gctccgccc ctacctgaag
ggcagacgcc tgggagagac gagtgcagc aaaaagaca actcgtctc ctttgtcctg
agccatcgca gctccagcca gagcagctgc tcccagccat ccacggcgtg accaccagc
cagggccagg gctgcagcct gagcctcagg ctgtgctggc ataagtgtc tgcctctagg
tgatggcgta tgttgtgta taaggtacct atcagttgt atccctccc tccctggggt
ggcttcagtg ggggagagag tggcctccat gatggaagat gataggggac tcagccatca
gacaacccc tggcctccta cagctacttc taccacctg aaccactgc tgcctgggc
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tcattctggg atattgtgaa aagcggtaaa tataggattg gtaccaatt gggtcaggaa
gtccagtgt ctggacttg ggtgaagcagt ggggttgga cctcagatgg gaaggtggt
gctaagatcc tctgacctc aagtgatatt tgcctttaa cgaacaaatg ctggggtcct
tggggaccag cttgtcagag ggtagcccta agagaagggt attacctgt aagacctct
ggcgagtg accctattaga acttgggtta aaaaatttta agaagctaatt gtttaagaa
catttggaa agaaaaagaa ataaatgtat ccagatagga aaagaagaag taaaactatt
tgcagatgac acagtttgt atatagaaaa tcctaaggaa ctcacacaca cacacacaca
cacacacgca cacagctatt agaactaata agcaagtcc gcaaggtttc aagatacaag
atcaatatac aaaaatgaat tgtatttctt tatactagca caaaacaata tgaacacgaa
gttaataat tccatttata ataccatcag aaagaataaa ataggaaatca acttaacaaa
acaagtgcaa gactgaaaac tacaaaattg gaaagaattt aaagaaggct taaataaatg
gaaagacatc ctgtgttcat ggtcagact tagtattgt aagatggcaa tactatccta
actgacatgc agattcagtg caatccttat gaaaatcata gctggctttt ttacagaaat
tgataagcta gtcccaaat tcataaagaa atgcaaggga cccagatata caaataagcc
ttgaaaaaga acaaggttg tggattcaca cttcctgatt tcataattta cgataaagg
aatcagctca gtgtgttact ggtttaagga tagacatacg gacagaata aagagtacag
atatgaacac ttatacttac ggtcaattga ttttgacaa ggttcccaag caaattcaat
agagaaagga gagtcttttc acaaatggc accgagacaa tgatatgcaa gtgcaaaaga
atgaggttg acccttact acactatgt caaaagataa ctcaaaacgc atccaagtc
taaatataag agctgaaact ataaatctt agaaagaaa ataggcatag atctttgtaa
ccttgaatta ggcagtggt tcttagatat gatcccaag acacaagcaa ccaatggaa
aataggtaaa ttggactta tcaagatttg aagctttgt gattgaaaag accctatcaa
gaaggtgaaa agataacctg cagaatggga gaaaatatt gcgagtata tatatgata
ggggttgta tctggaatat ataaataact cttataaac acaataagg agaaaaataa
atcaatttaa aaatgggt aacgggttga atagacattt ctccaaagaa gatatgcaa
tggctactaa gcacatgaaa aatactcaac attattattc attagggaaa tgcaagtcaa
aatcacaatg agattccagt ttacaatcac taggatggct acaataaaaa gatggacaag

[illegible]

217	3589	Purinergic Receptor P2Y, G- protein coupled, 2 (P2RY2)	NP_002555.1	agcagaacac ttacagcctgt gcaggtttat attgggaagc tgtagaggac caggacttgt gcagacgcca cagtcctccc agatattggac catcagtgac tcatgctgga tgaccccatg ctccgtcatt tgacaggggc tcaggatatt cactctgtgg tcagagtgca actgttccca taacccttag tcatcgtttg tgtgtataag ttgggggaat taagtttcaa gaaaggcaag agctcaaggt caatgacacc cctggcctga ctcccatgca agtagctggc tgtactgcca aggtacctag gtggagtgcc agcctaataca agtcaaatgg agaaacaggc ccagagaggga aggtggctta ccaagatcac ataccagagt ctggagctga gctaccctgg gtgggggcca agtcacaggt tggccagaaa accctggtaa gtaatgaggg ctgagtttg acagtgtct ggaatggact gggtgccacg gtggacttag ctctgaggag taccctcagg ccaagagatg aacatctggg gactaatatc atagacccat ctggaggctc ccatgggcta ggagcagtgt gaggctgtaa cttatactaa aggttgtgtt gcctgctaaa aaaaa MAADLGPWND TINGTWDGDE LYGRCRFNED FKYVLLPVSY GVVCVLGLCL NAVLYIFLC P RLKTNWASTT YMFHLAVSDA LYAASLPLLV YYARGDHPV FSTVLCKLVR FLFYTNLYCS ILFLTICISVH RCLGVLRLPLR SLRWGRARYA RRVAGADWVL VIACQAPVLY FVTTTSARGGR VTCHDTSAPL LFSREVAISS VMLGLLFAVP FAVILVCYVL MARRLLKPAY GTSGGLPRAX RKSVRTIAW LAVEALCFPL FHVTRTLIYS FRSLDLSCHT LNAINMAYKV TRPLASANSC LDPVLYFLAG QRLVRFARDA KPPTGPSPAT PARRRLGLRR SDRTDMQRIG DVLGSSEDFR RTESTPAGSE NTKDIRL	Homo sapiens
218	3595	Purinergic Receptor P2Y1	NM_002563	ccccctccc cggggatcca gttcgctgc tcccttcgc tgctggctt ttccgatgt A tgctgcgcc ctggccgccg ctgccctctc gccgcctcct accctcggg gccgcgcct aagtcgagga ggagagaatg accgaggtgc tgtggccggc tgtccccaac gggacggacg ctgccttctt ggcgggtccg ggttcgtctt ggggggaacag caggtgcgc tccactgccg ccgtctcttc gtcgttcaaa tgcgcttga ccaagacggg ctccagttt tactacctgc cggctgtcta catcttggtt ttcacatcg gcttctctggg caacagcgtg gccatctgga tgttcgtctt ccacatgaag cctggagcg ccatctccgt gtacatgttc aatttgctc tgcccgactt ctgtacgtg ctgactctgc cagccctgat ctctactac ttcaataaaa cagactggat ctccggggat gccatgtgta aactgcagag gtctatcttt catgtgaacc tctatggcag catcttggtt ctgacatgca tcagtgccca ccggtacagc ggtgtggtgt acccctcaa gtccctgggc cggctcaaaa agaagaatgc gatctgtatc agcgtgctgg tgtggctcat tgtgtgtgtg gcgactccc ccatctctt ctactcaggt accggggtcc gcaaaaaaa aaccatcac ttgtacgaca ccacctcaga cgagtacctg cgaagtatt tcactacag catgtgcacg accgtggcca tgttctgtgt ccccttggtg ctgattctgg gctgttacgg attaatgtg agagcttga ttacaaaaga tctggacaaac tctcctctga ggagaaaaac gatttacctg gtaatcatg tactacatgt ttttgcctgt tcttacatcc ctttccatgt gatgaaaacg atgaactga gggcccggtt tgattttcag accccagcaa tgtgtgcttt caatgacagg gtttatgcca cgtatcaggt gacaagaggt ctagcaagtc tcaacagttg tgtggacccc attctctatt tcttggcggg agatactttc agaaggagac tctcccgagc cacaaggaaa gcttctagaa gaagtggagg aaatttgcaa tccaagagt aagacatgac cctcaatatt ttacctgagt tcaagcagaa tggagataca agcctgtgaa ggcacaagaa tctccaaa cctctctgtt gtaatatggt aggatgctta acagaatcaa gtacttttcc cctctttaac tttctagttt agaaaaaat caaaccaaga aaatagtgag	Homo sapiens

221	3596	Purinergic Receptor P2Y5	NP_005758.1	actggtctgt caggagaagt gacttcagat tctctgaagt tcatggtgca gagaatttta ttcagcataa cctacagacc ttaaaaagta agatatattga caatgaatct gctgcctgaa ataaaaccat taggactcac tgggacagaa ctttcaag MSDLLEFVTL PFRIFYFTR NWPFGDLLCK ISVMLFYTNM YGSILFICI SVDRFLAIVY PFKSKTLRTK RNAKIVCTGV WLTVIGGSAP AVFVQSTHSQ GNNASEACFE NFPEATWKTY LSRIVIFIEI VGFPIPLIN VTCSSMVLKT LTKPVTLSRS KINKTKVLKM IFVHLIIFCF CFVPYNINLI LYSILVRTQTF VNCSVVAARV TMYPIITLCIA VSNCCFDPIV YYFTSDTIQN SIKMNWSVR RSDRFSEVH GAENFIQHNL QTLKSKIFDN ESAA aaggacagag gaggggccc tctgtcagc tggctgggag cagaggtggc tttgtctttt A cggaagaact ggttctgtgg aattgtgct tatttcccat caaggatcaa ggacctgctc tggggctacc tcaggggccc acaggatgag gggctggttt tcagatgagt tttctgcttg cctgtcatct gatatgtgc taaaaatttg caaactgcct tcttgtcagt tcttgctca ttcttcata gactcctgat atgtctcga gtttctcat ctgtgcctc tccagacttc tgccagaaca ttgcacgca cagtttcagg cacagaactg actggcagca ggggctgctc cacgagtggg aattgtctc agcatttcac ggaactgcaa gtaggacatt gctaaactct ggataacaa gaccttgcca gaagaacct ggttttgaa ggcggagttc aggtgagga gatgggtgcg gtccctcagt agccctgccc tccctgaaca taggaaccc acctgggag ccatggaaat ggacaatggc acaggcccag cctgggctt gccaccacc acctgtgtct accgcgagaa cttcaagcaa ctgtctgctg cactgtgta ttggcggtg ctggcggtg gcctgcctgt gaacatctgt gtcattacc agatctgca gtcggcgctg gccctgacc gcacggcgt gtacaccta aacctgtc tggctgacct gctatatgcc tgcctccctg ccctgctcat ctacaactat gcccaaggtg atcactggcc ctttggcgac ttcgctgccc gcctggctcg cttcctcttc tatgccaaacc tgcacggcag cctcctcttc ctcacctgca tcagcttcca gcgtacctg gccatctgcc acccgctggc cccctggcac aaactggggg gcgcgcgggc tgcctggcta gtgtgtgtg cctgttggt ggccgtgaca acccagtgcc tgccacagc catcttctgt gccacaggca tccagcgtaa ccgcaactgtc tgcctatgacc tcagcccgcc tgccttgccc accactata tgcctatgg cactggctctc actgtcatcg gcttctctgt gcccttctgt gccctgctgg cctgctactg tctcctggcc tgcgcctgt gcgcgccagg tggcccgcca gagcctgtgg ccagggagcg gcgtggcaa ggcggccgca tggcctgtgt ggtggctgt gcccttgcca tcagcttcc tgcctttcac atcaccaaga cagcctacct ggcagtgcg tcgacgcgg gcgtccctg cactgtattg gaggcctttg cagcggccta caaaggcacg cggccgtttg ccagtgcga cagcgtgctg gacccatcc tcttctactt caccagaag aagttccgccc ggcgaccaca tgagctccta cagaaactca cagccaaatg gcagaggcag ggtcgtgag tccctcaggt cctgggcagc cttcatattt gccatttgt cgggggcacc aggagcccca ccaaccccaa accatgcgga gaattagagt tcagctcagc tgggcatgga gttaatatcc ctacaggac ccagaagctc accaaaaact atttcttcag cccctctctt ggcacagacc ctgtgggcat ggagatggac agacctgggc ctggctcttg agaggctcca gtcagccatg gagagctggg gaaaccacat taaggtgctc acaaaaatac agtgtgacgt gtactgtcaa aa	Homo sapiens
222	3597	Purinergic Receptor P2Y6	NM_004154	actggtctgt caggagaagt gacttcagat tctctgaagt tcatggtgca gagaatttta ttcagcataa cctacagacc ttaaaaagta agatatattga caatgaatct gctgcctgaa ataaaaccat taggactcac tgggacagaa ctttcaag MSDLLEFVTL PFRIFYFTR NWPFGDLLCK ISVMLFYTNM YGSILFICI SVDRFLAIVY PFKSKTLRTK RNAKIVCTGV WLTVIGGSAP AVFVQSTHSQ GNNASEACFE NFPEATWKTY LSRIVIFIEI VGFPIPLIN VTCSSMVLKT LTKPVTLSRS KINKTKVLKM IFVHLIIFCF CFVPYNINLI LYSILVRTQTF VNCSVVAARV TMYPIITLCIA VSNCCFDPIV YYFTSDTIQN SIKMNWSVR RSDRFSEVH GAENFIQHNL QTLKSKIFDN ESAA aaggacagag gaggggccc tctgtcagc tggctgggag cagaggtggc tttgtctttt A cggaagaact ggttctgtgg aattgtgct tatttcccat caaggatcaa ggacctgctc tggggctacc tcaggggccc acaggatgag gggctggttt tcagatgagt tttctgcttg cctgtcatct gatatgtgc taaaaatttg caaactgcct tcttgtcagt tcttgctca ttcttcata gactcctgat atgtctcga gtttctcat ctgtgcctc tccagacttc tgccagaaca ttgcacgca cagtttcagg cacagaactg actggcagca ggggctgctc cacgagtggg aattgtctc agcatttcac ggaactgcaa gtaggacatt gctaaactct ggataacaa gaccttgcca gaagaacct ggttttgaa ggcggagttc aggtgagga gatgggtgcg gtccctcagt agccctgccc tccctgaaca taggaaccc acctgggag ccatggaaat ggacaatggc acaggcccag cctgggctt gccaccacc acctgtgtct accgcgagaa cttcaagcaa ctgtctgctg cactgtgta ttggcggtg ctggcggtg gcctgcctgt gaacatctgt gtcattacc agatctgca gtcggcgctg gccctgacc gcacggcgt gtacaccta aacctgtc tggctgacct gctatatgcc tgcctccctg ccctgctcat ctacaactat gcccaaggtg atcactggcc ctttggcgac ttcgctgccc gcctggctcg cttcctcttc tatgccaaacc tgcacggcag cctcctcttc ctcacctgca tcagcttcca gcgtacctg gccatctgcc acccgctggc cccctggcac aaactggggg gcgcgcgggc tgcctggcta gtgtgtgtg cctgttggt ggccgtgaca acccagtgcc tgccacagc catcttctgt gccacaggca tccagcgtaa ccgcaactgtc tgcctatgacc tcagcccgcc tgccttgccc accactata tgcctatgg cactggctctc actgtcatcg gcttctctgt gcccttctgt gccctgctgg cctgctactg tctcctggcc tgcgcctgt gcgcgccagg tggcccgcca gagcctgtgg ccagggagcg gcgtggcaa ggcggccgca tggcctgtgt ggtggctgt gcccttgcca tcagcttcc tgcctttcac atcaccaaga cagcctacct ggcagtgcg tcgacgcgg gcgtccctg cactgtattg gaggcctttg cagcggccta caaaggcacg cggccgtttg ccagtgcga cagcgtgctg gacccatcc tcttctactt caccagaag aagttccgccc ggcgaccaca tgagctccta cagaaactca cagccaaatg gcagaggcag ggtcgtgag tccctcaggt cctgggcagc cttcatattt gccatttgt cgggggcacc aggagcccca ccaaccccaa accatgcgga gaattagagt tcagctcagc tgggcatgga gttaatatcc ctacaggac ccagaagctc accaaaaact atttcttcag cccctctctt ggcacagacc ctgtgggcat ggagatggac agacctgggc ctggctcttg agaggctcca gtcagccatg gagagctggg gaaaccacat taaggtgctc acaaaaatac agtgtgacgt gtactgtcaa aa	Homo sapiens

223	3597	Purinergic Receptor P2Y6	NP_004145.1	MEWDNGTGQA IGLPPTTCVY RENFKQLLLP PVYSAVLAAG LPLNICVITQ ICTSRRALTR P	Homo sapiens
				TAVYTLNLAL ADLLYACSLP LLIYNYAQGD HWPFQDFACR LVRELFYANL HGSILFLTCI	
				SFQRYLGICH PLAPWHKRG RRAAWLVCVA VWLAVTTQCL PTAIFAATGI QNRRTVCYDL	
				SPPALATHYM PYGMALTVIG FLLPFAALLA CYCLLACRLC RQDGPAPVA QERRGKAARM	
				AVVVAFAI SFLPFIHTKT AYLA VRSTPG VPCTVLEAFA AAYKGRPFA SANSVLDPIL	
				FYFTQKKERR RPHELLQKLT AKWQRQGR	
224	3599	G Protein- Coupled Receptor 23 (GPR23)	NM_005296	cctaccgggc catagtgtca gagtgggtgaa cccctgcagc cagcaggcct cctgaaaaaa A	Homo sapiens
				aagtcacatgg gtgacagaag attcattgac ttccaattcc aagattcaaa ttcaagcctc	
				agaccacaggt tgggcaatgc tactgccaat aatacttgca ttgttgatga ttccctcaag	
				tataatctca atgggtgctgt ctacagtgtt gtattcatct tgggtgatga aaccaacagt	
				gtctctctgt ttgtctctctg ttcccgcatg aaaaatgagaa gtgagactgc tattttttatc	
				accaatctag ctgtctctga ttctgctttt gtctgtacac taccttttaa aatattttac	
				aacttcaacc gccactggcc ttttgggtgac accctctgca agatctctgg aactgcatc	
				cttaccaca tctatgggag catgctctt ctcacctgta ttagtgtgga tcgtttcctg	
				gccattgtct atccttttctg atctcgtact attaggacta ggaggaaatc tgccattgtg	
				ttgtctgggtg tctggatcct agtctcagt ggcggatatt cagcctcttt gttttccacc	
				actaatgtca acaatgcaac caccacctgc ttggaaggct tctccaaacg tgtctggaa	
				acttatttat ccaagatcac aatattttat gaagtgtgtg ggtttatcat tcctctaata	
				ttgaatgtct cttgctcttc tgtgtgtgtg agaactcttc gcaagcctgc tactctgtct	
				caaatggga ccaataagaa aaaagtactg aaaaatgatca cagtacatat ggcatgtctt	
				gtggtatgtt ttgtacccta caactctgtc ctctctctgt atgcccgtgt gcgctcccaa	
				gctattacta attgcttttt ggaaagattt gcaaaagatca tgtacccaat caccttgtgc	
				cttgcaactc tgaactgttg ttttgacct tctatctatt acttcacct tgaatccttt	
				cagaagtctt tctacatcaa tgcccacatc agaattgagt ccctgtttaa gactgaaaca	
				ccttgacca caaagccttc ccttcagct attcaagagg aagtgaatga tcaacaaca	
				aataatggtg gtgaattaat gctagaatcc acccttttagg tatgagaaat gtgttcagg	
				ccagatatgg ttctctctat aatttttctt atgctataaa ctaaaagattt gaagctaattg	
				atactagaa taatgcacca aatccagtc gatacatttg ttggaaggta tactgtagag	
				tttttattgc tgtttgttc agtaattata ggtcaaatct aattacaaca accaagatgg	
				attgccaaac tcttctgctt ggttgggaat tcatgtatc gcattatcca ggtggctagt	
				ggcatttgat aatatagaga tgactttgaa cctttcaaaa aggtatttct attccaatga	
				tatttggtaa ttaggttggg cctataaata tagaacaatt tcagggattt ttaaaaaatt	
				gtgttactac tgatatatgc tagtttttatt ttattttttt ggactgtcat tgagtttatt	
				ttagcacaa gataattttt gcctaactt attaataaga aatgtgtcaa atttttaaca	
				ttggtaaaat atgttatgtg cattttgaa acagaaaaa aatgtgtgtg gcatgtacgt	
				gggtgggaag aaaaagaaaa ttaacaggat ttacacaatt ataaccacca gcagtgtgag	
				tttaaaaaac ttctgtgttt ttacaccaa ttaaaatttt catgtcaaac ttcaagcca	
				gaaagctgct aaatacgtgt ctggcaggta aaagctggaa aattacttaa aacaggaaa	
				tgtcaataaa aaaacttgag caacaccaa atattttttc ttaaatgtc acgttatctt	
				cattttggga aactaggttc tataaataat ttatcctccc tgttatactt tggagcacag	
				cacagccaga aaggggtgctg atttgtgcc aggtcaggag caaattgaaa aaaaaataa	

227	3638	Parathyroid Hormone Receptor 2 (PTH2)	NP_005039.1	<p> catttggtggc tgacttttcat gggctgggtcc aatggctgggt tgggtggagag ggcttgggctg atactcctat gcttgagttc aaaggctgaa aattcagtta aggtgttact taataatagt tttaggctc catgaattgg ctctgtgtaa tactaacgac atgaaaaatgc aagtgtcaat ggagtagttt attacctctt attggcatca agttttcttc taaattaatg tatgggtattt gctctgtgat tggtaatttt ttctgtctac ttttgggtag aaaaaagatt caattgcttg gctgtagctt tctctcatat atatcacctt aaatcctctt aagatctttt agtgtgtatc atttccctt tagaaactag tattctctta ttcttactt taatgtactt ctatcactgc attatattt cctgtgcata ggagcaatta ggatctaaaa aaatatatgg gaagataaaa gatctaagaa caagtacttg ctggaataat agtggctgg acattgataa aataatgcat ttataacaat tacatgtgtt ttgggaaca aggaataatt ctcaaaaaag aatatttcac acatcccttc ttttgaatgg cctcttttg accagccaga cctcaggtct tcactctttc ttctttgtaa accatgtcat gtggaagat ttctcagtt agtgagcttg tgtctgcaaa ttgattttgt ttgtaatgta ttgtgatgc aaatcatgct gcatctatat ctttttcttg tttgagctgt tactacattg tacatggcat gtgggatcaa ttaaaaaatt gttttaaaaa t </p>	Homo sapiens
228	3640	Parathyroid Hormone Receptor 1 (PTH1)	NM_000316	<p> cggagggagc cggccctagg cgttgccgat ggggaccgcc cggatcgac cgggctggc A gctcctgctc tgctgcccc tgctcagtc cgcgtacgcg ctggtggatg cagatgacgt catgactaaa gaggaacaga tcttctgct gcacctgct caggcccatg gcgaaaaacg gctcaaggag gtcctgcaga ggcagccag cataatggaa tcagacaagg gatggacatc tgctccaca tcagggaagc ccaggaaaga taaggcatct gggaagctct acctgagtc tgaggaggac agggaggcac ccactggcag caggtaccga ggggccccct gtctgccgga atgggaccac atcctgtgt ggcgctggg ggcaccaggt gagggtgtg ctgtgccctg tcgggactac attatgact tcaatcaca aggccatgcc taccagctgt gtgaccgcaa tggcagctgg gagctggtc ctgggcacaa caggacgtgg gccaactaca gcgagtgtg caaatcttc accaatgaga ctctgaacg ggaggtgttt gaccgctgg gcatgattta cacgtgggc tactccgtg ccttggcgtc cctcaccgta gctgtgctca tctggccta ctttaggcgg ctgcactgca cgcgcaacta catccacatg cactgttcc tgtcctcat gtgctgcgcc gtgagcatct tcgtcaagga cgtgtgtct tactctggcg ccacgcttga tgaggctgag cgcctcaccg aggagagct gcgcgccatc gccaggcgc ccccgccgc tgccaccgc gctgcggct acgcggtg gagggtgggt gtgaccttct tcctttactt cctggccacc aactactact ggattctggt ggaggggctg tacttgaca gcctcatctt </p>	Homo sapiens

229	3640	Parathyroid Hormone Receptor 1 (PTHRI)	NP_000307.1	catggccttc ttctcagaga agaagtacct gtggggcttc acagtctctg gctgggggtct gcccgtgtc ttctgtgctg tgtgggtcag tgtcagagct accctggcca acaccgggtg ctgggacttg agtccggga acaaaaagt gatacaccag gtgcccattc tggcctccat tgtgtcaac ttcatctct tcataatat cgtccgggtg ctgcccacca agctgcgga gaccaacgcc ggccggtgtg acacacggca gcatccggg aagctgtctca atccacgt ggtgtcatg cccctctttg cggtccacta cattgtcttc atggccacac cataccga ggtctcagg acgctctggc aagtccagat gcaactatg atgtcttca actccttcca gggattttt gtcgcaatca tatactgtt ctgcaatggc gaggtacaag ctgagatcaa gaaatcttg agccgttga cactggcact ggacttcaag cgaaggcac gcagcggag cagcagctat agtacggc ccatgtgtc ccacaaagt gtgacaaatg tcggccccc tgtgggactc ggccctgccc ttagccccc cctactgcc actgccacca ccaacggcca ccctcagct cctggccatg ccaagccagg gacccagcc ctggagacc tcgagaccac accactgcc atggctgtc ccaaggacga tgggtcttc aacggctcct gctcaggcct ggacgaggag ccctctggc ctgagcggc accctggct ctacaggaa agtgggagac agtcatgtga ccaggcctg gggcctggac ctgctgacat agtggatgga cagatggacc aaaagatggg tgggtgaatg atttccact caggccctgg ggccaaagg aaaaacaggg aaaaaagaa aaaaaaga aaaaaggaa	VMTKEEQIFL LHRAQAQCEK RLKEVLQRP P SEEDKEAPTG SRYGRPCLP EWDHILCWPL NGSWELVPGH NRTWANYSEC VKFLTNETRE YFRRLHCTPN YIHMFLFSF MLRAVSIFVK PATAAGVAV SVRATLANTG CWDLSGNNK LPAVFAVWV QYRKLLKST LVIMPLFGVH ETNAGRCSTR FCNGEVQAEI KKSWSRWTLA QGFVAILYC RLLPTATTNG HPQLPGHAKP RVGLGLPLSP PPALLQEEWE TVM	Homo sapiens
230	3732	PACAP Receptor Type 1	NM_001118	agccccagaga cacattgggg ctgacctgcc gctgctgtca gtgggaggcc agtgggtgtg A gccaagaagt gtcatggctg gtgtcgtgca cgtttccctg gctgctcact gcggggcctg tccgtggggc cggggcagac tccgcaaaag acgcgcagcc tgcaagtccg cgccccagag acacattggg gctgacctgc cgtgtgtgc agtgggaggc cagtgggtgt ggccaagaag tgtcatggct ggtgtgtgc acgtttccct ggtgtgtctc ctctgtgtc ctatggcccc tgccatgcat tctgactgca tcttcaagaa ggagcaagcc atgtgcctgg agaagatcca gagggccaat gagctgatgg gcttcaatga ttctcttcca gctgtctctg ggatgtgga caacatcacg tgttgaagc ccgcccattg ggtgtgatg gctcctgtca gctgccccga gctcttccga atcttcaac cagaccaaagt ctgggagacc gaaaccattg gagagtctga ttttgtgtgac agtaactcct tagatctctc agacatggga gtggtgagcc ggaactgcac ggaggatggc tggtcggaac ccttccctca ttactttgat gcctgtgggt ttgatgaata tgaatctgag actgggggacc aggattatta ctacctgtca gtgaaggccc tctacacggt tggctacagc acatccctcg tcacctcac cactgccatg gtcaccttt gtcgcttccg gaagctgcac tgcacacgca acttcatcca catgaacctg tttgtgtcgt tcatgtgtgag	agccccagaga cacattgggg ctgacctgcc gctgctgtca gtgggaggcc agtgggtgtg A gccaagaagt gtcatggctg gtgtcgtgca cgtttccctg gctgctcact gcggggcctg tccgtggggc cggggcagac tccgcaaaag acgcgcagcc tgcaagtccg cgccccagag acacattggg gctgacctgc cgtgtgtgc agtgggaggc cagtgggtgt ggccaagaag tgtcatggct ggtgtgtgc acgtttccct ggtgtgtctc ctctgtgtc ctatggcccc tgccatgcat tctgactgca tcttcaagaa ggagcaagcc atgtgcctgg agaagatcca gagggccaat gagctgatgg gcttcaatga ttctcttcca gctgtctctg ggatgtgga caacatcacg tgttgaagc ccgcccattg ggtgtgatg gctcctgtca gctgccccga gctcttccga atcttcaac cagaccaaagt ctgggagacc gaaaccattg gagagtctga ttttgtgtgac agtaactcct tagatctctc agacatggga gtggtgagcc ggaactgcac ggaggatggc tggtcggaac ccttccctca ttactttgat gcctgtgggt ttgatgaata tgaatctgag actgggggacc aggattatta ctacctgtca gtgaaggccc tctacacggt tggctacagc acatccctcg tcacctcac cactgccatg gtcaccttt gtcgcttccg gaagctgcac tgcacacgca acttcatcca catgaacctg tttgtgtcgt tcatgtgtgag	Homo sapiens

231	3732	PACAP Receptor Type 1	NP_001109.1	<p>ggcgatctcc gtcttcatca aagactggat tctgtatgcy gagcaggaca gcaaccactg cttcatctcc actgtggaat gtaagccgt catggttttc tccactact gtgtgtgtgc caactacttc tggctgttca tcgagggcct gtacctcttc actctgctgg tggagacctt cttccctgaa aggagatact tctactggtg cgtgagact ctactttgat gacacaggct gctgggatat gtgtgtgaca gtgtgggcta ggtgggtgtg caaaggccct gtggttggct ctatcatggt gaatgacagc acagctctgt gcttttattg gcattatcgt catccttgtg cagaaacttc agtctccaga taactttgtg ctttttattg gcattatcgt catccttgtg cagaaacttc agtctccaga catgggaggc aatgagtcca gcatttactt ggcactggcc cgggtccacc tgcgtctcat ccactattc ggaatccact acacagtatt tgccttctcc ccagagaaatg tcagcaaaaag ggaagactc gtgtttgagc tggggtggg ctccttccag ggccttgggtg tggctgttct ctactgtttt ctgaatgggt aggtacaagc ggagatcaag cgaataatggc gaagctggaa ggtgaaccgt tacttcgctg tggacttcaa gcaccgacac ccgtctctgg ccagcagtgg ggtgaatggg ggcaccagc tctccatcct gagcaagagc agtcccaaa tccgcatgct tggcctccct gctgacaatc tggccacctg agccatgctc ccct</p>	Homo sapiens
				<p>P DLPLLSVGGQ WCWPRSVMAG CPGMWDNITC VSRNCTEDGW ILCRFRKLHC HYCIVSVNFV TGCWDMNDST STLLILPLFG KWRSWKVNRY DNLAT</p>	
232	3844	Apelin Receptor	NM_005161	<p>atggaggaag gtggtgattt tgacaactac tatggggcag acaaccagtc tgaagtgtgag A tacacagact ggaatcctc gggggccctc atccctgcca tctacatgtt ggtcttccctc ctgggcacca cgggaaacgg tctggtgctc tggaccgtgt ttcggagcag ccgggagaaag aggcgctcag ctgatatctt cattgctagc ctggcggtgg ctgacctgac ctctgctggtg acgctgcccc tgtgggctac ctacacgtac cgggactatg actggccctt tgggaccttc tctgcaagc tcagcagcta cctcatcttc gtcaacatgt acgccagcgt ctctgacctc accggcctca gcttcgaccg ctacctggc atcgtgagggc cagtggccaa tgcctggctg aggctgaggg tcagcggggc cgtggccacg gcagttcttt ggggtgctggc cgcctcctg gccatgcctg tcatggtgtt acgcaccacc ggggacttgg agaaccacc taagggtgcaag tgcacatgg actactccat ggtggccact gtgagctcag agtgggctg ggaggtgggc ctgggggtct cgtccaccac cgtgggcttt gtggtgacct tcaccatcat gctgacctgt tacttcttca tcgccccaac catcgctggc cacttccgca aggaacgcac cgaaggcctg cggaaagcggc gccggtgct cagcatcacc gtggtgctgg tggtagacct tgcctgtgac tggatgcctt accacctggt gaagacgctg tacatgctgg gcagcctgct gcaactggccc tgtgactttg acctcttctt catgaacatc ttccctactt gcaactgcat cagctacgtc aacagctgccc tcaaccctt cctctatgct ttttctgacc cccgcttccg ccaggcctgc acctccatgc tctgctgtgg ccagagcagg tgcgcaggga cctccacag cagcagtggg gagaagtcaag ccagctactc ttcggggcac agccaggggc ccggcccaaa catgggcaag</p>	Homo sapiens

233	3844	Apelin Receptor	NP_005152.1	ggtggagaac agatgcacga gaaatccatc ccctacagcc aggagaccct tgtggttgac tag	MEEGGDFDNY YGADNQSECE YTDWKSSGAL IPAIYMLVFL LGTTGNGLVL WTVFRSSREK P RRSADIFIAS LAVADLTFW TPLWATYTY RDYDWPFGTF FCKLSSYLIF VNMVASVFCL TGLSFDRLA IVRPVANARL RLRVSGAVAT AVLWLAAAL AMPVMVLRIT GDLENTTKVQ CYMDYSMVAT VSSEAWAVEG LGVSSTTVGF VVPFTIMLTC YFFIAQTIAG HFRKERIEGL RKRRLLSII VLVVTFALC WMPYHLVKTLL YMLGSLHWP CDFDLFLMNI FPYCTCISYV NSCLNPFLYA FFDPRFRQAC TSMMLCCGQSR CAGTSHSSSG EKASYSYSGH SQPGPNMGMK GGEQMHEKSI PYSQETLVVD	Homo sapiens
234	3845	Chemokine- Like Receptor 1 (CMKLR1)	NM_004072	gaattcggca cgagtcaggg aagcagcccc ggcgggccagc aggagactca ggacagagca A ggctccctgg gaagctccg ggtgataggg gtgttccagc tgcggcgctc tgggggttca gagggggatc ttgaatgaac aaatgaatga actgctttct gggcaaacag ccacagccag aggagcctgt gattggcaga aagaagccag ggtgtgcaag tctcccaac agcctcgagt ggcctgcagt cacagggaac cctcagggaag accttccggg cagagaccag agggaagccc atctctccag cagaactgct tggattttc taccaggagg ctccaggctc tgcaacaatg atagcagaag ctgatggcat cttagatatc aggtctgggac tagcacagca tcaactctac cactttctgt tggtcacagc aactaccat gccagtgcag attcaagggg aggagaaata gagtcactt ctgtatggga ggcgtgacat agaattggagg atgaagatta caacacttcc atcagttacg gtgatgaata cctgattat ttagactcca ttgtggtttt ggaggactta tccccttgg aagccagggt gaccaggatc ttctggttg tggctacag catcgctcgc ttctcggga ttctgggcaa tggctgggtg atcatcattg ccaccttcaa gatgaagaag acagtgaaca tggctgtggtt cctcaacctg gcagtggcag atttctgtt caacgtcttc ctcccaatcc atatacacta tgcggccatg gactaccatc ggggttttcgg gacagccatg tgcaagatca gcaacttctc tctcatccac aacatgttca ccagctctt cctgctgacc atcatcagct ctgaccgctg catctctgtg ctctccctg tctggtccca gaaccaccgc agcgttcgcc tggcttacct ggctgcagc aacctgcagc ggaaatatc ctgttgagt tcccactc tegtcttccg ggacacagcc aacctgcagc ggaatatc ctgttcaac aacttcagcc tgtccacacc tgggtcttcc tegtggccca ctcaactcca aatggacct gtgggtata gccggccatc ggtggtgact gtcacccgct tctctgtgg ctctctgtc ccagtctca tcatcacagc ttgtacctc acctcgtgt gcaaaactgca gcgcaaccgc ctggccaaga ccaagaagcc cttaagatt attgtgacca tcatcattac ctctctc tgctggtgcc cctaccacac actcaacctc cttagagctc accacactgc catgctggc tctgtcttca gccctgggtt gccctggcc actgcccctg ccattgcca cagctgcag aacccattc tgtatgttt catgggtcag gacttcaaga agttcaaggt ggcctcttc tctgcctgg tcaatgtctc aagtgaagat acaggccact ctctctacc cagccataga agctttacca agatgtcctc aatgaatgag aggacttcta tgaatgagag ggagaccggc atgctttgat cctcactgtg gaacccctca atggactct tcaaccagg gacaccaag gatatgtctt ctgaagatca agccaagaac ctctttagca tccaccaatt ttcactgcat tttgcatggg atgaacagtg ttttatgttg ggaatctagg gcctggaacc cctttcttct agtggacaga acatgctgtg tccatacag ccttgacta gcaatttatg ctcttggga ggccagcctt gactgactca aagcaaaaaa ggaagaattc	Homo sapiens	

235	3845	Chemokine- Like Receptor 1 (CMKLR1)	NP_004063.1	MEDEDYNTSI IIATFKMKKT MFTSVFLTI LHGKISCENN IVCKLQRNRL ALAIANSCMN TSMNERETGM	SYGDEYPDYL VNMVFLNLA ISSDRCISVL FSLSTPGSSS AKTKPKFKII PILYVFMGQD	DSIVVLEDLS VADEFNVFL LPVWSQNHRS WPTHSQMDPV VTIIITFFLC FKKEKVALFS	PLEARVTRIF PIHITYAAMD VRLAYMACMV GYSRHMVTV WCPYHTLNL RLVNALSEDT	LUVVYSIVCF YHWVFGTAMC IRVLAFFLSS TRFLCGFLVP ELHHTAMPGS GHSSYPHSRS	LGILGNGLVI KISNFLLIHN PSLVFRDTAN VLIITACYLT VFSLGILPLAT FTKMSSMNER	Homo sapiens
236	3846	Sphingolipid Receptor Edg1	NM_001400	gtcgggggga cttcgcccctg cacaaaaagc cgccctctag accatggggc gtcaactatg gacaaggaga atcctggaga atgtactatt gtaaacctgc cgggaaggga attgagcgct ctcttcctgc atgggctgga aagcactata ctgtactgca aacatttcca atcgtccctga gtgggctgca gctgtgctca cgggccttca ttcaagcgac caccgccaga tcttcttctc ccacccccagt caagccagag tagagttagt tatataattct agctcctaaa tctttgtctg gtgtgcactt ttcatacccc ctgggggtgtg tgggaagatg	gcagcaagat cttgagcgag ctggatcact cgcttcctg ccaccagcgt atatacctgt acagcattaa acatctttgt ttattggcaa tcttgtctgg gtatgtttgt atatcacaat taatcagcgc actgcactag tctctttctg gaatctactc aggccagcgc gcgtcttcct aggtgaagac actccggcac tccggatcat ccatcatcgc aagacgaagg agaaactggaa gtttggaaaa ggagaaaggg tcctgtgaac acccccctgg gggttcattt gagctttgag ctgcttcttt tcctcaacct ggaatgatcg aagatgggtt	gcgaagcgag gtcgcgggtt catcgaacca gagtagcgcc cccgctggtc ccggcattac actgacctcg cttgctgacc tctggccctc ggccaccacc ggccctgtca gctgaaaatg ctgctgggtc tgcgtgtccc caccacgggtc cttggtcagg cagctctgag cgctgtctgg ctgtgacatc caaccccatc gtcctgctgc cggcatggaa ggacaaccca gctgtccacc aaatctctgg gaataatagc aatgcactgg agctttgatt ggccccctct gagatgtttt aggatgccc tcttttactt atacttttaa gcaaatagcc ggagggtgta aacaatgtcc	ccgtacagat ccgagggcct ccccctgaagc accccggtt aagggccacc aactacacgg gtgggtgtca atttggaaaa tcagacctgt tacaagctca gctccgtgt aaactccaca atctccctca agctgtctca tctcactgtc tctcactgtc gcccctgagc aagtcgctgg gcaccgctct ctcttcagag atttacctc aagtgcctga gagacattc gcggagactc gcaaatcgga tgtcttctgg gctcttctgg ctgccaggga tggtgtcggg gatcaggtcc cgaaggtctc tgcccccatg agtttcaaac acacccacc tgatctgccc tatactttaa gcaaatagcc tctgtgagc tctgtgagc	ccgagggctct ctccagccaa cagtgaaggc ctctcgcct cctggggaca gcagctcggc gaaagctgaa ttctcatctg ccaagaaaat tggcaggagt ctcccgccca ctcccgccca tgagttctct tcagttctct acgggagcaa tccctgctaa tcactcgtct cggagtaact tgaccaacaa gcggagactc gcaaatcgga tgtcttctgg gctcttctgg ctgccaggga tggtgtcggg gatcaggtcc cgaaggtctc tgcccccatg agtttcaaac acacccacc ctacctgaga gttatcagag tatgttgagt acgtaggctg tctgtgagc	A	Homo sapiens

237	3846	Sphingolipid NP_001391.2 Receptor Edg1	catgtaagcg ggatccggttt ttggaattt ttaccattc atatccattg aagccgaat actttgattt ctttaaaaaa catcttttca atgaaatgtg ttaccattc atatccattg aagccgaat actttgattt ctttaaaaaa aagccactt tatctaaatg atattagcca ggatcccttg tgctcctagg gaaacagaca agcaaaaaca agtgaaaacc gaatggatta tctttgcaa accaaggag atttcttagc aaatgagctt acaaaatatg acatccgtct tctccactt ttgtgattt tatttcagaa tcttggtgta ttcatttcaa gcaacaacat gttgtattt ttgtgtgtaa aagtactttt cttgattttt gaatgtattt gtttcaggaa gaatcattt tatggattt tctaaccctg gttaactttt ctagaatcca cctcttggtg ccttaagca ttactttaac tggtagggaa cgccagaact ttttaagtcca gctattcatt agatagtaat tgaagatatg tataaatatt acaaagaata aaaatatatt actgtctctt tagtatggtt ttcagtgcac ttaaacccgag agatgtcttg tttttttaa aagaatagta ttaaataggt tctgacttt tgtggatcat tttgacata gctttatcaa cttttaaaca ttaataaact gatttttta aag MGPTSVPLVK AHRSSVSDYV NYDIIVRHYN YTGKLNISAD KENSIKLTSV VFILICCFII P LENIFVLLTI WKTKKFRPM YFIGNLALS DLLAGVAYTA NLLSGATTY KLTPAQWFLR EGSMFVALSA SVFSLLAIAI ERYITMLKMK LHNGSNFRL FLLISACWVI SLILGGLPIM GWNCSALSS CSTVLPYHK HYILFCTTVF TLLLSIVIL YCRIYSILVRT RSRRLTFRKN ISKASRSSEK SLALLKTVII VLSVFIACWA PLFILLLLDV GCKVKTCDIL FRAEYFLVLA VLNSGTNPPII YTLTNKEMRR AFIRIMSCCK CPSGDSAGKF KRPIAGMEF SRKSDNSSH PQKDEGNPE TIMSSGNVNS SS	Homo sapiens
238	3847	Sphingolipid NM_005226 Receptor Edg3	atggcaactg cctcccgcc gcgtctccag ccggtgcggg ggaacgagac cctgcgggag A cattaccagt acgtgggaa gttggcgggc aggcctgaag aggcctccga ggcgagcacg ctcaccaccg tgcctctctt ggtcatctgc agcttcacg tcttgagaa cctgatgggt ttgattgcca tctggaaaaa caataaatctt cacaaccca tgaactttt cattggcaac ctggctctct cgcacctgt gcccgccatc gcttacaag tcaacattct gatgtctggc aagaagacgt tcagcctgtc tcccacggtc tggttcctca gggagggcag tatgtctctg gcccttgggg cgtccacctg cagcttactg gccatgcga tggagcggca cttgacaatg atcaaaatga ggccttacga cgccacaag aggcaccgc tcttctcct gatcgggatg tgctggctca ttgctctcac gctggcgcc catcctgccc ctctactcca agaagtacat tgccttctg aatctccctg actgctctac catcctgccc cctggtgacc atcgtgatcc tctacgcacg catctactt atcagcatct tcacggccat cctggtgacc taaggtggcc aaccacaaca actcggagcg gtccatggca ctggtgaagt ccagcagccg taaggtggcc taaggtggcc actcggagcg gtccatggca ctgctgcgga ccgtgtgat tgggtgagc ggtgtcagc gtgcagcgt gcccatcct cttcaaggct atcctcttcc tcattgatgt ggcctgcagg gtcaggatg gcccatcct cttcaaggct cagtggttca tcgtgttggc tgtgctcaac tccgacctga acccgatcat ctacacgctg gccagcaagg agatgcggcg ggcctcttcc cgtctggtct gcaactgcct ggtcagggga cgggggggcc gcgcctcacc catccagcct gcgctcgacc caagcagaag taaatcaagc agcagcaaca atagcagcca ctctccgaag gtcaaggaa accctgcccc cacagacccc tcctcctgca tcattgacaa gaacgcagca cttcagaatg ggatcttctg caactga MATALPPRLQ PVRGNETIRE HYQYVGKLAG RLKEASEGST LTTVLFVIC SFIVLENLMV P LIAIWNKNKF HNRMYFFIGN LALCDLLAGI AYKVNILMSG KKTFLSLPTV WFLREGSMFV ALGASTCSLL AIAIERHLM IKNRPYDANK RHRVFLIIGM CWLIAFTLGA LPILGNCLH	Homo sapiens
239	3847	Sphingolipid NP_005217.1 Receptor Edg3		Homo sapiens

240	3848	C-C Chemokine Receptor 9	NM_006641	<p>NLPDCSTILP LYSKKYIAFC ISIFTAILVT IVILYARIYF LVKSSSRKVA NHHNSERSMA LLRTVVIVVS VFIACWSPLF ILFLIDVACR VQACPILFKA QWFIVLAVLN SAMNPVIYTL ASKEMRRRAFF RLVCNCLVRG RGARASPIQP ALDPSRSKSS SSNNSSHSPK VKEDLPHTDP SSCINDKNAA LQNGIFCN</p>	A	Homo sapiens
				<p>gcccctcatc ccaggcgag agcaacccag ctctttcccc agacactgag agctggtggt gctgctgtgc ccaggcgag ttgcatgccc ctccacaagc cctattccca acatggctga tgactatggc tctgaatcca catcttccat ggaagactac gttaaactca acttcaactga cttctactgt gagaaaaaca atgtcaggca gtttgcgagc catttctcc cacccttgta ctggctcgtg ttcatcgtgg gtgacctggg caacagtctt gttatccttg tctactggta ctgcacaaga gtgaagacca tgaccgacat gttccttttg aatttgcaa ttgctgacct cctctttctt gtcactcttc cctctgggc cattgctgct gctgaccagt ggaagtccca gaccttcatt tgcaagggtg tcaacagcat gtacaagatg aactttaca gctgtgtgtt gctgatcatg tgcattcagc tggacaggta cattgccatt gccaggcca tgagagcaca tacttggagg gagaaaaggc tttgtacag caaatgggtt gctttacca tctgggtatt ggcagctgct ctctgcatcc cagaaatctt atacagccaa atcaaggagg aatccggcat tgctatctgc acctgggtt acctagcga tgagagcacc aaactgaagt cagctgtctt gacctgaag gtcatctggt ggttcttctt tccctcgtg gtcatggctt gctgctatcc catcatcatt cacacctga tacaagccaa gaagtcttcc aagcacaag cctaaaaagt gacctcaact gtcctgaccg tctttgtctt gtctcagttt cctacaact gcattttgtt ggtgcagacc attgacgctt atgcatgtt catctccaac tgtgcgttt ccaccaacat tgacatctgc tccagggtca cccagacct cgccttcttc cacagttgcc tgaacctgt tctctatgtt tttgtgggtg agagattccg ccgggtcttc gtgaaaaacc tgaagaactt gggttgcatc agccaggccc agtgggttcc attacaagg agagagggaa gcttgaagct gtcgtctatg ttgctggaga caacctcagg agcactctcc ctctgagggt tcttctctga ggtgcatggt tcttttgga gaaatgagaa atacagaaac agtttcccca ctgatgggac cagagagagt gaaagagaaa agaaaactca gaaaggatg aatctgaact atatgattac ttgtagtcag aatttgccaa agcaaatatt tcaaaatcaa ctgactagt caggaggctg ttgattggct ctgactgtg atgcccgcaa tctcaaaagg aggaactaagg accggcactg tggagcacc tggctttgccc actgcccga gcatcaatgc cgtgcctctt ggaggagccc ttggatttcc tccatgcat gtgaacttct gtggcttcag tctcatgct gcctcttcca aaaggggaca cagaagcact ggctgctgct acagaccgca aaagcagaaa gtttcgtgaa aatgtccatc ttgggaaaat ttctaccct gctcttgagc ctgatacccc atgccaggct ttatagattc ctgatctaga acctttccag gcaatctcag acctaatctt cttctgttct ccttgttctg ttctgggcca gtgaaggctc ttgttctgag ttgaaacga tctgcaggct ttgccagtga accctggac aactgaccac acccaagg catccaaagt ctgttggtt ccaatccatt tctgtgtctt gctggagggt ttaacctaga caagatttcc gcttattcct tggatgggtg acagtgtct tccatggcct gagcagggag attataacag ctgggttcgc aggagccagc cttggccctg ttgtaggctt gtctgttga gtggcacttg ctttgggtcc accgtctgtc tgcctccctag aaaaagggtt ggttcttttg gccctcttct tctgagggc cactttattc tgagggaatc agtgagcaga tatgggcagc agccaggtag ggcaagggg tgaaagcgag gccttgctg aggtctattt acttccatg tctctcttat ctactctat</p>		

241	3848	C-C Chemokine Receptor 9	NP_006632.2	MADDYGEEST YWYCTRVKTM CVLLIMCISV SGIAICTMVY LKVTITVLTV NPVLYVFVGE	SSMEDYVNFN TMFLNLNLAI DRYIAIAQAM PSEDETKLKS FVLSQFPYNC RFRDLVKTL	FTDFYCEKNN ADLLFLVTLF RAHTWREKRL AVITLKVILG ILLVQTIIDAY KNLGCISQAO	VRQFASHFLP FWAIAAADQW LYSKMVCFTI FFLPFVVMAC AMFISNCAVS WVSFTRREGS	PLYWLVFIVG KFQTFMCKV WVLAALCIP CYTIIHTLI TNIDICFQVT IKLSSMLLET	ALGNSLVILV NSMYKMFYS EILYSQIKEE QAKKSSKHKA QTIAFFHSCL TSGALS	Homo sapiens
242	3849	G Protein- Coupled Receptor GPR1	NM_005279	atggaagatt tattactactc tccctgggtg tggttcacgg attgcggatt ttccactggc atgtttgcc catcctgtct atctggcttt ttcaataatc atcaggccacc acaatgagta tccagtaggc ccttatcacc gtgatgcagg cccatccttt gagatactca aggaactcag MEDLEETLFE	SSMEDYVNFN TMFLNLNLAI DRYIAIAQAM PSEDETKLKS FVLSQFPYNC RFRDLVKTL atggaagatt tattactactc tccctgggtg tggttcacgg attgcggatt ttccactggc atgtttgcc catcctgtct atctggcttt ttcaataatc atcaggccacc acaatgagta tccagtaggc ccttatcacc gtgatgcagg cccatccttt gagatactca aggaactcag	FTDFYCEKNN ADLLFLVTLF RAHTWREKRL AVITLKVILG ILLVQTIIDAY KNLGCISQAO atggaagatt tattactactc tccctgggtg tggttcacgg attgcggatt ttccactggc atgtttgcc catcctgtct atctggcttt ttcaataatc atcaggccacc acaatgagta tccagtaggc ccttatcacc gtgatgcagg cccatccttt gagatactca aggaactcag	VRQFASHFLP FWAIAAADQW LYSKMVCFTI FFLPFVVMAC AMFISNCAVS WVSFTRREGS gaatttgaaa aaatttg			

245	3850	G Protein- Coupled Receptor 10 (GPR10)	NP_004239.1	gscctcagac cagcgggctg ggtgttcggc ggcggcctgt gccacctggt cttcttctctg cagccgggtca ccgtctatgt gtcggtgttc acgctcacca ccctgcagat gccacgctac gtcgtgctgg tgcacccgct gaggcgggcg atctcgtgc gctcagcgc ctacgctgtg ctggccatct ggcgctgtc cgcggtgctg ggcgtgccc cgcgctgca cactatcac gtggagctca agcgcacga cgtgcgcctc tgcgaggagt tctggggctc ccaggagcgc cagcgccagc tctacgctg ggggctgctg ctggtcacct accgtctccc tctgctggtc atcctcctgt cttacgtccg ggtgtcagt agctccgca accgctggt gccgggctgc gtgacccaga gccaggccga ctgggacgc gctcgccgc ggcgacctt ctgctgtctg gtggtggtcg tgggtgtgtt cgcgctctgc tggctgcgc tgcagctctt caacctgctg cgggacctgc accccacgc catcgacct tacgctcttg gctggtgca gctgctctgc cactggctcg ccatgagttc ggcctgtcac aaccttca tctacgctg gctgcacgac agcttcgcg aggagctcg caaactgttg gtcgcttgg ccgcaagat agcccccat ggccagaata tgacctcag cgtggtcatc tga GLIVLLYSV VVDFSLGPP AVTTPANQSA EASAGNSVA GADAPAVTPF QSLQLVHQLK P AFEPGRWVF GGGLHVFEL QPVTVVSVF LTTIAVDR VLVHPLRRR ISLRLSAYAV LAIWALSAVL ALPAAVHTYH VELKPHDVRL CEEFWSQER QRQLYAWGLL LVTYLLPLLV ILLSYRVSV KLNRVVP GC VTQSQADWDR ARRRRTFCLL VVVVVFVAVC WLPPLHVFNL RDLDPHAIDP YAFGLVQLLC HWLAMSSACY NPFIYAWLHD SFREELRKL VAWPRKIAPH QNMTVSVVI	Homo sapiens
246	3851	G Protein- Coupled Receptor GPR12	NM_005288	atgaatgaag acctgaaggt caatttaagc ggcgtgcctc gggattattt agatgcgct A gctgcggaga acatctcgc tgcgtctcc tcccggttc ctgcgctaga gccagacct gagctcgtag tcaacccctg ggacattgtc ttgtgtacct cgggaacctt catctcctgt gaaatgcca ttgtgtctt tatcatctc cacaaccca cgcgtgcgc acctatgttc ctgctaata ggcgctggc tctgcagac ctgctggccg gcatgggact catcaccaat ttgtttttt cctacctgt tcagtcagaa gccaccaagc tggtcacgat cggcctcatt gtcgctctt tctctgcctc tgcctgcgc ttgtggtga tcaactgtga ccgctacctc tcaactgtact acgctctgac gtaccttcg gagaggacgg tcaactgtac ctatgtcatg ctcgtcatgc tctgggggac ctccatctgc ctggggctgc tgcccgtcat gggctggaac tgccctccag acgagtcac ctcagcgtg gtcagaccgc tcaccaagaa caacgcggcc atcctctcgg tgccttctt cttcatgtt ggcctcatgc ttcagctcta catccagatc tgtaagattg tgatgagga cgcctatcag atagccctgc agcaccatt cctggccacg tcgcactatg tgaccacccg gaaaggggtc tccacctgg ctatcctct ggggacctt gctgctgtg ggtgcttctt caccctctat tcttgatag cggattacac ctacccctcc atctatact acgcaacct cctgcccgc acctacaatt ccatcatcaa cctgtcata tatgctttca gaaaccaaga gatccagaaa ggcctctgtc tcaattgtc cggctgcatc ccgtccagtc tgcgccagag agcgcgctgc cccagtgtg ttag ENAIIVLIIF HNPSLRAPMF LLIGSLALAD LLAGLGLITN ELVWNPWDIV LCTSGTLISC P VASFSASVCS LLAITVDRL SLYYALTYHS ERTVFTTYM LVMLWGTSIC LGLLPMGMW CLRDESTCSV VRPLTKNAA ILSVSFLMF ALMLQLYIQI CKIVMRHAHQ IALQHHFLAT	Homo sapiens
247	3851	G Protein- Coupled Receptor GPR12	NP_005279.1		Homo sapiens

248	3852	CX3C Chemokine Fractalkine Receptor 1	NM_001337	SHYVTRKGV STLAILGTF AACWMPFTLY SLIADYTPS IYTYATLLPA TYSIINPVI YAFRNQEIQK ALCLICGCI PSSLAQRARS PSDV gggacagatc cagattccct ttgcagtcga cgccaggcct tcaccatgga tcagttccct A gaatcagatg cagaaaactt tgagtacgat gatttggtg aggcctgtta tattggggac atcgtggtct ttgggactgt gttcctgtcc atattcact ccgtcatctt tgccattggc ctgggggaa attgttggtt agtgtttgc ctcacaaca tggttgtagc caagagtgc accgacattt accctcgtga cctggccttg tctgatctgc cactttgcc ttctggactc actatttgat aaatgaaaag ggccctcaca atgccatgtg caaattcact accgcttctt tcttcacgtg ctttttttga agcatattct tcataccgt catcagcatt gataggtaac tggccatcgt cctggccgcc aactccatga acaaccggac cgtgcagcat ggcgtcacca tcagcctagg cgtctgggca gcagccattt tgggtggcag acccagttc atgttcacaa agcagaaaaga aatgaatgc cttggtgact acccgaggt ccttcaggaa atctggcccg tgctccgcaa tgtggaacaa aattttcttg gcttcact cccctgctc attatgagtt attgctactt cagaaatcat cagacgtgtt ttctctgcaa gaaccacaag aaagccaaag ccattaaact gatcctctcg gttggtcact gtgttttctt cttctggaca ccctacaaag ttatgatatt cctggagacg cttaagctct atgacttctt tccagttgt gacatgagga aggatctgag gctggccctc atagcatt gctggggaga agttcagaag atacctttac tgttgccctga atcctctcat gctgtcctg ggctgtcctg tgtgggcgct cagtcacgt tgatttctcc cacctgtatg ggaatgcct caggcatgga agtgttctga gcagcaattt tacttaccac tcactggaat cacaaggag gagatgcatt gctcctctc tgaagggaat cccaaagcct tgtgtctaca acgagtgatg agttcctgaa cctgatgctg actagtgag aagattttt ttgttatttc gagaacctgg aaaaatgatg acccaatgca cacaaaacaa cctagagtg ttgttgagaa ttacaggcac aatttgaaga atgaacaaat tgaactcttt gaatgacaaa gtagtagacat ttctcttact gcaaatgtca tcagaacttt ttggtttgca gatgacaaaa attcaactca gactagttta gtaaatgag ggtggtgaat attgtcata ttgtggcaca agcaaaaagg gtgtctgagc cctcaaatg aggggaacca gggcctgagc caagcta MDQFPESVTE NFEYDDLAE CYIGDIVVFG TVFLSIFYSV IFAIGLVGNL LVVFALTN SK P KPKSVTDIYL LNLALSDLF VATLPFWTHY LINEKGLHNA MCKFTTAFFF IGFFGSIFFI TVISIDRYLA IVLAANSMMN RTVQHGVTIS LGVWAAAILV AAPQFMFTKQ KENECLGDYP EVLQEIWPVL RNVEITNLFGE LLPLIMSYC YFRIIQTLES CKNHKKAKAI KLILLVIVF FLFWTPYNVM IFLETLKLYD FFPSCDMRKD LRLALSVTET VAFSHCCCLNP LIYAFAGEKF RRYLYHLYGK CLAVLCGRSV HVDFSSSESQ RSRHGSVLSS NRYHTSDGD ALLLL atggaccag aagaaactt agttatttg gattattact atgtacagag cccaaactct A gacatcagg agaccactc ccattgtcct tacacctgt tcttcttcc agtctttac acagctgtgt tctgactgg agtgcgtggg aacctgttc tcattggagc gttgcatttc aaacccggca gccgaagact gatcgacatc tttatcata atctggctgc cctgacttc atttttcttg tcacattgoc tctctgggtg gataaagag catctctagg actgtggagg acgggctcct tctctgcaa agggagctcc tacatgatc cgtcaatat gcactgcagt gtcctcctg tcaattgcat gagtgttgac cgtacctgg ccattgtgt gccagtcgta tccaggaaat tcagaaggac agactgtgca tatgtagtct gtgccagcat ctggtttatc	Homo sapiens
249	3852	CX3C Chemokine Fractalkine Receptor 1	NP_001328.1	gtgtctgagc cctcaaatg aggggaacca gggcctgagc caagcta MDQFPESVTE NFEYDDLAE CYIGDIVVFG TVFLSIFYSV IFAIGLVGNL LVVFALTN SK P KPKSVTDIYL LNLALSDLF VATLPFWTHY LINEKGLHNA MCKFTTAFFF IGFFGSIFFI TVISIDRYLA IVLAANSMMN RTVQHGVTIS LGVWAAAILV AAPQFMFTKQ KENECLGDYP EVLQEIWPVL RNVEITNLFGE LLPLIMSYC YFRIIQTLES CKNHKKAKAI KLILLVIVF FLFWTPYNVM IFLETLKLYD FFPSCDMRKD LRLALSVTET VAFSHCCCLNP LIYAFAGEKF RRYLYHLYGK CLAVLCGRSV HVDFSSSESQ RSRHGSVLSS NRYHTSDGD ALLLL atggaccag aagaaactt agttatttg gattattact atgtacagag cccaaactct A gacatcagg agaccactc ccattgtcct tacacctgt tcttcttcc agtctttac acagctgtgt tctgactgg agtgcgtggg aacctgttc tcattggagc gttgcatttc aaacccggca gccgaagact gatcgacatc tttatcata atctggctgc cctgacttc atttttcttg tcacattgoc tctctgggtg gataaagag catctctagg actgtggagg acgggctcct tctctgcaa agggagctcc tacatgatc cgtcaatat gcactgcagt gtcctcctg tcaattgcat gagtgttgac cgtacctgg ccattgtgt gccagtcgta tccaggaaat tcagaaggac agactgtgca tatgtagtct gtgccagcat ctggtttatc	Homo sapiens
250	3853	G Protein- Coupled Receptor GPR15	NM_005290	gtgtctgagc cctcaaatg aggggaacca gggcctgagc caagcta MDQFPESVTE NFEYDDLAE CYIGDIVVFG TVFLSIFYSV IFAIGLVGNL LVVFALTN SK P KPKSVTDIYL LNLALSDLF VATLPFWTHY LINEKGLHNA MCKFTTAFFF IGFFGSIFFI TVISIDRYLA IVLAANSMMN RTVQHGVTIS LGVWAAAILV AAPQFMFTKQ KENECLGDYP EVLQEIWPVL RNVEITNLFGE LLPLIMSYC YFRIIQTLES CKNHKKAKAI KLILLVIVF FLFWTPYNVM IFLETLKLYD FFPSCDMRKD LRLALSVTET VAFSHCCCLNP LIYAFAGEKF RRYLYHLYGK CLAVLCGRSV HVDFSSSESQ RSRHGSVLSS NRYHTSDGD ALLLL atggaccag aagaaactt agttatttg gattattact atgtacagag cccaaactct A gacatcagg agaccactc ccattgtcct tacacctgt tcttcttcc agtctttac acagctgtgt tctgactgg agtgcgtggg aacctgttc tcattggagc gttgcatttc aaacccggca gccgaagact gatcgacatc tttatcata atctggctgc cctgacttc atttttcttg tcacattgoc tctctgggtg gataaagag catctctagg actgtggagg acgggctcct tctctgcaa agggagctcc tacatgatc cgtcaatat gcactgcagt gtcctcctg tcaattgcat gagtgttgac cgtacctgg ccattgtgt gccagtcgta tccaggaaat tcagaaggac agactgtgca tatgtagtct gtgccagcat ctggtttatc	Homo sapiens

251	3853	G Protein- Coupled Receptor GPR15	NP_005281.1	MDPEETSIVL KPGSRRLIDI VLLLTMSVD PYCAEKKATP KIIFIVVAAF IYYIFDSYIR	DYYATSPNS FIINLAASDF RYLAIVWPVV IKLIWSLVAL LVSWLPFNTF RAIVHCLCPC	DIRETHSHVP IFLVTLPLMV SRKFRRTDCA IFTFFVPLLS KFLAIVSGLR LKNYDFGSST	YTSVFLPVFY DKESLGLMR YVVCASIWFI IVTCYCCIAR QEHYLPSSAIL ETSDSHLTKA	TAVFLTGVLG TGSFLCKGSS SCLLGLPTLL KLCAHYQQSG QLGMEVSGPL LSTFIHAEDF	NLVLMGALHF YMISVNMHCS SRELTLLDDK KHNNKLKSKI AFANSCVNP ARRRKRVSIL	Homo sapiens
252	3854	G Protein- Coupled Receptor GPR18	NM_005292	gaaagagaca ctggaaaacta acactgtttc agtggaaagt agtatcatgc cccttttaac tatcttcata caagaagaga tataatgact gtacttctgc tcttgccctt acttaaaaa cacgaccacc ctgcctcaag actgacattt tcataatctc aaggatcatc tttcgctttc cacctctctc acaatttcag cagaaaaagt atgaataata cgfcaatgga ttatcttcat	aagcagcaat ctttttaaag cagaaaagagc ctgaaaaaatg ctaccaacaa agctcacatc attggattat accacggtaa ttaccctttc cagatttcttg attagtctg acgtgcaaa cctctgctac attcttgaca tttttcttga cttcacggca atcacgctgc ctgatgctgg atgaacctca gtccgagtca ttccgactcy atttcaatcc ataactatca ataactatca	taaagtcagc caacaaaaaga tattttaaca ctcatctctc gctgtaaaaat cagatgaata ttgttaacat ccatctatat gaatgtttta gagctctcac acagatacat cgtgctggc cgtgctggc tgctctataa tcactctatc ttcctttgtt ggacgtctaa tggtgcaggt gaacggggga gcacgtgtct ttagtgtcat gtcgtctacg atttcaatcc ataactatca ataactatca	ccagcaccaa gtctaaaaa gaagcaactc acacagactt gatcaccttg caaaaattgca cactgcattta gatgaatgtg ttatgcaaaa agtgttttac ggccattgta gtgtgtggga agaccagat aaaagctgtg catcatgatt ggtgctact gctgaaaccc gtcgtctgc gaacagttac ggatgtgatt gtataaccgt gtcataaagc ataactaccc cactcaaat agtccttttt	ctccgacgc aatacaaca aagatatcc ttgatggaca aacaatcaag gcccttgct tgggttttca gcttagtgg gatgaatggc catttgagga ctttatggct acgccaaga tgacctgac ctccgcccac acctcaactg tggctcattat agaagtccat tccacatctg gagcctttac tcggtttcaaa gaagcatgcy gtgaaaatgt cacttcaact actactctgg ataaaaattca	Homo sapiens	

253	3854	G Protein- Coupled Receptor GPR18	NP_005283.1	<p>MMVALVDLI FIMTLPERME YKIAALVFYS CIFIIGLFVN ITALWVFSC TTKRRTVTIY P</p> <p>MAIVQPKYAK ELKNTCKAVL ACVGWIMTL TTTPLLLLY KDPDKDSTPA TCLKISDIY</p> <p>LKAVNVNLIT LTGFFFLIPL FIMIGCYLVI IHNLLHGRTS KLKPKVKEKS IRIIITLLVQ</p> <p>VLVCFMPFHI CFAFLMLGTG ENSYNPWGAF TTFMLNLSTC LDVILYIIVS KQFQARVISV</p> <p>MLYRNYLRSM RRSFRSGSL RSLSNINSEM L</p>	Homo sapiens
254	3855	G Protein- Coupled Receptor GPR19	NM_006143	<p>aattaagaga aaaaaagtga atatggtttt tgtcacaga atggataaca gcaagccaca A</p> <p>tttgattatt cctacacttc tgggtccctt ccaaaaccgc agctgcactg aaacagccac</p> <p>acctctgcca agccaatacc tgatggaatt aagtgaaggag cacagttgga tgagcaacca</p> <p>aacagacctt cactatgtgc tgaaccgccg ggaagtggcc acagccagca tcttctttgg</p> <p>gattctgtgg ttgttttcta tcttcggcaa ttccttggtt tgtttggtca tccataggag</p> <p>taggaggact cagtctacca ccaactactt tgtggtctcc atggcatgtg ctgaccttct</p> <p>catcagcgtt gccagcagc ctttctctct gctccagttc accactggaa ggtggacgct</p> <p>gggtagtga acgtgcaagg ttgtgcgata ttttcaatat ctcactccag gtgtccagat</p> <p>ctacgttctc cctccatct gcatagacc gttctacacc atcgtctatc ctctgagctt</p> <p>caaggtgtcc agagaaaaag ccaagaaaat gattgcggca tcgtggatct ttgatgcagg</p> <p>ctttgtgacc cctgtgctct ttttctatgg ctccaactgg gacagtcatt gtaactattt</p> <p>cctccctctc tcttggaag gcactgccta cactgtcatc cacttctgg tgggctttgt</p> <p>gattccatct gtcctcataa ttttatatta ccaaaaggtc ataaaaataa tttggagaat</p> <p>agccacagat ggcgaacgg tgaggaggac aatgaacatt gtccctcggg caaaagtga</p> <p>aactatcaag atgttctca ttttaaatct gttctttttg ctctcctggc tgccttttca</p> <p>tgagctcag ctatggcacc cccatgaaca agactataag aaaagttccc ttgttttcac</p> <p>agctatcaca tggatatact ttagttcttc agcctctaaa cctactctgt attcaattta</p> <p>taatgccaat tttcggagag ggatgaaga gactttttgc atgtcctta tgaatgtta</p> <p>ccgaagcaat gctatacta tcacaacaag tcaaggatg gccaaaaaa actacgttg</p> <p>catttcagaa atcccttcca tggccaaaac tattaccaaa gactcgtatc atgactcatt</p> <p>tgacagagaa gccaaaggaaa aaaagcttgc ttggcccatc aactcaaatc caccaaaatac</p> <p>ttttgtctaa gttctcattc tttcaattgt tatgcaccag agattaaaaa gctttaacta</p> <p>taaaaacaga agctatttct atattgtttt tcaactcaact ttccaaggga aatgttttat</p> <p>tttgtaaaat gcattcattt gtttactgt</p>	Homo sapiens
255	3855	G Protein- Coupled Receptor GPR19	NP_006134.1	<p>MVFAHRMDNS KPHLIPTLL VPLQNRCTE TATPLPSQYL MELSEHSWM SNOTDLHYVL P</p> <p>KPEVATASI FFGILWLFSI FGNSLVCLVI HRSRRTQSTT NYFVSMACA DLLISVASTP</p> <p>FVLLQFTTGR WTLGSATCKV VRYFQYLTPG VQIYVLLSIC IDRFYTIYVP LSEKVSREKA</p> <p>KKMIASWIF DAGFVTPVLF FYGSNWDSDHC NYFLPSSWEG TAYTVIHFLV GFVIPSVLII</p> <p>LFYQKVIKVI WRIGTDGRTV RRTWNIVERT KVTKIMFLI INLLFLLSWL PFHVAQLMHP</p> <p>HEQDYKKSSL VFTAITWISF SSSASKPTLY SIYNANFRRG MKETFCMSSM KCYRSNAYTI</p> <p>TTSSRNAAKN YVGISEIPSM AKTITKDSIY DSFDREAKEK KLAWPINSNP PNTFV</p>	Homo sapiens
256	3856	G Protein- Coupled Receptor GPR2/CCR10	NM_016602	<p>agagatgggg acggaggcca cagageaggt ttcctggggc cattactctg gggatgaaga A</p> <p>ggacgcatac tcggctgagc cactgccgga gctttgctac aagcccgatg tccaggcctt</p> <p>cagccggggc ttccaaccca gtgtctcctt gaccgtggct gcgctgggtc tggccggcaa</p> <p>tggcctggtc ctggccaccc acctggcagc ccgacgcgca gcgcgctcgc ccactctgc</p>	Homo sapiens

257	3856	G Protein- Coupled Receptor GPR2/CCR10	NP_057686.1	<p>ccacctgctc cagctggccc tggccgacct cttgtggccc ctgactctgc ccttcgcggc agcaggggct cttcagggct ggagtctggg aagtgcacc tgcgcacca tctctggcct ctactggcc tcttccacg ccggttctct cttctggcc tgtatcagcg ccgaccgcta cgtggccatc ggcgagcgc tcccagcgg gcccgggccc tccactcccg gccgcgcaca cttgggtctc gtcactgtgt ggctgtgtc actgtctcg gcgtgcctg cgtgctctt cagccaggat ggcagcggg aaggccaacg acgtctgc ctcatttcc ccgagggcct cacgcagcg gtgaagggg cgagcccggt ggccaggtg gccctgggct tcgctgctgc gctggggctc atggtagcct gctacgcgt tctggccgc agctgctgg ccgccagggg gccgagcgc cggcgtgccc tgcgtgctg ggtggctctg gtggcgccct tcgtggtgct gcagctgccc tacagcctg cctgtgctg ggatactgc gatctactgg ctgcgcgga gcggagctgc cctgccagca aacgcaagg tctgcactg ctggtagcca gcggcttggc cctgcccgc tgtggcctca atccgttct ctacgcctt ctggccctgc gcttcgcca ggacctggg aggtgctac ggggtgggag ctgcacctca gggcctcaac ccgcgcggg ctgccccgc cggccccgc ttcttctctg ctacgtccc acggagaccc acagtctctc ctgggacaaac tagggctgag aatctagagg agggggcagg ctgagggctg tgggaaagg gagtaggtg gggaaacatg agaaagagg agggacctaa agggactacc tctgtgcctt gccacattaa attgataaca tggaaatgaa aaaaaaaa aaaa</p>	Homo sapiens
258	3857	G Protein- Coupled Receptor GPR20	NM_005293	<p>atgccctctg tgtctccagc ggggccctcg gccggggcag tcccaatgc caccgagtg A acaaagtgcc ggaccaatgc cagcgggctg gagggtcccc tgttccacct gtttggcccg ctggacgagg agctgcatgg cacttccca ggcctgtgcy tggcgtgat ggcgtgacac ggagccatct tcttggcagg gctgggtgctc aacgggctgg cgtgtacgt cttctgctgc cgaccccgg ccaagacacc ctacgtctc ctcagtcac accctgtggt gaccgatcta ctggtagggc tgtccctgccc cagcgccttc gctgtgtact acggcgccag gggctgctg cgctgtgct tccgcacgt cctcgggttac tctctcaaca tgcactgctc cctcctctc ctcacctgca tctgcgtgga ccgctacctg gccatctgcy ggcgcgaag tcccgcgccc tgccgcccag ctgcctgtgc caggccctg tgcgcttgc tgtgctggc cgcgggtgccc gtcacacctgt cgggtgctgg cgtgacagc agccggccct gctgcccgt ctttgcgctg actgtcctgg agttcctgct gccctgctg gtcatacagc tgtttaccgg ccgcatcatg tgtgactgt cgcggccggg tctgtccac cagggtcgc agcgcgctg gcgggcccag cagctcctgc tcaagggtgct cactatctt ctcgtctgct tcacgcccct ccacgcccgc caagtggccc tggcgtgtg gccgacatg ccacaccaca cagacctgct ggtctaccac gtggccgtga cctcagcag cctcaacag tgcattggacc ccatgtcta ctgctctgctc accagtggct tccaggccac cgtccgagc cttctcgcc agcaggaga gcgtgagccc agcagcgggt acgtggtcag catgcacagg agctcccaagg gctcaggccc tcatcacatc</p>	Homo sapiens

259	3857	G Protein- Coupled Receptor GPR20	NP_005284.1	ctcagtgccg gccctcacgc cctcacccag gccctgggcta atggggcccgaggcttag MPSVSPAGPS AGAVPNATAV TTVRTNASGL EVPLFHLFAR LDEELHGTFP GLCVALMAVH P GAIFLAGLVL NGLALYVFCC RTRAKTPSVI YTNILVVTDL LVGLSLPTRF AVYVGARGCL RCAPPHVLGY FLNMHCSILF LTCICVDRLY AIVRPEAPAA CRQPACARAV CAFVWLAAGA VTLSVLGVTG SRPCCRVFAL TVLEFLPLL VISVFTGRIM CALSRPGLLH QGRQRRVRAM QLLLTVLIIF LVCFTPFHAR QVAVALWPDMM PHHTSLVYH VAVTLSSINS CMDPIVYCFV TSGFQATVRG LFGQHGGEREP SSGDVVSMHR SSKSGSRHHI LSAGPHALTQ ALANGPEA atgaactcca ccttgtagtg taatcacagc agccaccctt ttgctctctt ggcatttggc A tatttggaaa ctgtcaattt ttgctctttt gaagtattga ttattgtctt tctaactgtt ttgattattt ctggcaacat cattgtgatt ttgtattttt actgtgcacc ttgttggaa catcacacta caagtatttt tatccagact atggcatatg ctgacctttt ttgtggggtg agctgcgtgg tcccttcttt atcaactctc catcaccccc ttccagtaga ggagtccttg acttgcaga tatttgggtt ttagtagtaca gtcttgaaga gcgtctccat ggccttcttg gcctgtatca gcatgtatag atacattgcc attactaaac ctttaacctt taatactctg gttacacctt ggagactacg cctgtgtatt ttcttgattt ggctatactc gacctggct ttctgcctt cctttttcca ctggggcaaa ctgacctgt ttccctctt gctatactc tgtgcggagt cctggcacac cgactctac ttccacctgt ttccagatgt gtttcagtg gccccagcag ccttattgt ctgcttcacc tatttcaaca tcttccgcat ctgccaacag cacacaaaagg atatcagcga aaggcaagcc cgcttcagca gccagagtgg ggagactggg gaagtgcagg cctgtcctga taagcgtat gccatggctc tgttctgaat cactagtgt ttttacatcc tctggttgcc atatatcatc tacttctgt ttgaaagctc cactggccac agcaaccgct tgcatactt cttgaccacc ttgcttgccta ttagtaaacg tttctgcaac tgtgtaattt atagtcttc caacagtgt ttccaaagag gactaaagc cctctcaggg gctatgtga cttctgtgc aagtcagact acagccaagc acccttacc agttagaagc aaaggccctc ttaatggatg tcatatctga aaagccctc ttaatggatg tcatatctga MNSTLDGNQS SHPFCLLAFG YLETNFCLL HHTTSYFIQT MAYADLFVGV SCVPSLSLL HHPLPVEESL TCQIFGFVVS VLKSVSMASL P ACISIDRYIA ITRPLTYNTL VTPWRLRLCI FLIWLSTLV FLPSFFHWGK PGYHGDVDFQW CAESWHTDSY FTLFVMMLY APAALIVCFT YFNIFRICQQ HTKDISERQA RFSSQSGETG EVQACPDKRY AMVLFRITSV FYILWLPYII YFLESSTGH SNRFASFLT WLAINSNFCN CVIYSLNSV FQRLKRLSG AMCTSCASQT TANDPYTVRS KGPLNGCHI atgtgtttt cctccattct ggaatacaac atgcagctctg aatctaaccat tacagtgcga A gatgacattg atgacatcaa caccatattg taccacaccat tatcatatcc gttaaagcttt caagtgtctc tcaccggatt tcttatgtta gaaattgtgt tgggacttgg cagcaacctc actgtatttg tactttactg catgaaatcc aacttaatac actctgtcag taacattatt acaaatgaat tcatgtact ttagtgaata atttgtgtgg gatgtattcc ttaactata gttatccctc tgccttccat ggagagtaac actgtctccta ttgtctgttt ccatgaggct tgtgtatctt ttgcaagtgt ctcaacagca atcaacgttt ttgctatcac ttgggacaga tatgacatct ctgtaaaacc tgcaaaccca attctgacaa tgggcagagc tgtaattgt atgatatcca ttgtgatttt ttctttttt tctttcctga tctctttat tgaggtaaat	Homo sapiens
260	3858	G Protein- Coupled Receptor GPR21	NM_005294	atgaactcca ccttgtagtg taatcacagc agccaccctt ttgctctctt ggcatttggc A tatttggaaa ctgtcaattt ttgctctttt gaagtattga ttattgtctt tctaactgtt ttgattattt ctggcaacat cattgtgatt ttgtattttt actgtgcacc ttgttggaa catcacacta caagtatttt tatccagact atggcatatg ctgacctttt ttgtggggtg agctgcgtgg tcccttcttt atcaactctc catcaccccc ttccagtaga ggagtccttg acttgcaga tatttgggtt ttagtagtaca gtcttgaaga gcgtctccat ggccttcttg gcctgtatca gcatgtatag atacattgcc attactaaac ctttaacctt taatactctg gttacacctt ggagactacg cctgtgtatt ttcttgattt ggctatactc gacctggct ttctgcctt cctttttcca ctggggcaaa ctgacctgt ttccctctt gctatactc tgtgcggagt cctggcacac cgactctac ttccacctgt ttccagatgt gtttcagtg gccccagcag ccttattgt ctgcttcacc tatttcaaca tcttccgcat ctgccaacag cacacaaaagg atatcagcga aaggcaagcc cgcttcagca gccagagtgg ggagactggg gaagtgcagg cctgtcctga taagcgtat gccatggctc tgttctgaat cactagtgt ttttacatcc tctggttgcc atatatcatc tacttctgt ttgaaagctc cactggccac agcaaccgct tgcatactt cttgaccacc ttgcttgccta ttagtaaacg tttctgcaac tgtgtaattt atagtcttc caacagtgt ttccaaagag gactaaagc cctctcaggg gctatgtga cttctgtgc aagtcagact acagccaagc acccttacc agttagaagc aaaggccctc ttaatggatg tcatatctga aaagccctc ttaatggatg tcatatctga MNSTLDGNQS SHPFCLLAFG YLETNFCLL HHTTSYFIQT MAYADLFVGV SCVPSLSLL HHPLPVEESL TCQIFGFVVS VLKSVSMASL P ACISIDRYIA ITRPLTYNTL VTPWRLRLCI FLIWLSTLV FLPSFFHWGK PGYHGDVDFQW CAESWHTDSY FTLFVMMLY APAALIVCFT YFNIFRICQQ HTKDISERQA RFSSQSGETG EVQACPDKRY AMVLFRITSV FYILWLPYII YFLESSTGH SNRFASFLT WLAINSNFCN CVIYSLNSV FQRLKRLSG AMCTSCASQT TANDPYTVRS KGPLNGCHI atgtgtttt cctccattct ggaatacaac atgcagctctg aatctaaccat tacagtgcga A gatgacattg atgacatcaa caccatattg taccacaccat tatcatatcc gttaaagcttt caagtgtctc tcaccggatt tcttatgtta gaaattgtgt tgggacttgg cagcaacctc actgtatttg tactttactg catgaaatcc aacttaatac actctgtcag taacattatt acaaatgaat tcatgtact ttagtgaata atttgtgtgg gatgtattcc ttaactata gttatccctc tgccttccat ggagagtaac actgtctccta ttgtctgttt ccatgaggct tgtgtatctt ttgcaagtgt ctcaacagca atcaacgttt ttgctatcac ttgggacaga tatgacatct ctgtaaaacc tgcaaaccca attctgacaa tgggcagagc tgtaattgt atgatatcca ttgtgatttt ttctttttt tctttcctga tctctttat tgaggtaaat	Homo sapiens
261	3858	G Protein- Coupled Receptor GPR21	NP_005285.1	atgaactcca ccttgtagtg taatcacagc agccaccctt ttgctctctt ggcatttggc A tatttggaaa ctgtcaattt ttgctctttt gaagtattga ttattgtctt tctaactgtt ttgattattt ctggcaacat cattgtgatt ttgtattttt actgtgcacc ttgttggaa catcacacta caagtatttt tatccagact atggcatatg ctgacctttt ttgtggggtg agctgcgtgg tcccttcttt atcaactctc catcaccccc ttccagtaga ggagtccttg acttgcaga tatttgggtt ttagtagtaca gtcttgaaga gcgtctccat ggccttcttg gcctgtatca gcatgtatag atacattgcc attactaaac ctttaacctt taatactctg gttacacctt ggagactacg cctgtgtatt ttcttgattt ggctatactc gacctggct ttctgcctt cctttttcca ctggggcaaa ctgacctgt ttccctctt gctatactc tgtgcggagt cctggcacac cgactctac ttccacctgt ttccagatgt gtttcagtg gccccagcag ccttattgt ctgcttcacc tatttcaaca tcttccgcat ctgccaacag cacacaaaagg atatcagcga aaggcaagcc cgcttcagca gccagagtgg ggagactggg gaagtgcagg cctgtcctga taagcgtat gccatggctc tgttctgaat cactagtgt ttttacatcc tctggttgcc atatatcatc tacttctgt ttgaaagctc cactggccac agcaaccgct tgcatactt cttgaccacc ttgcttgccta ttagtaaacg tttctgcaac tgtgtaattt atagtcttc caacagtgt ttccaaagag gactaaagc cctctcaggg gctatgtga cttctgtgc aagtcagact acagccaagc acccttacc agttagaagc aaaggccctc ttaatggatg tcatatctga aaagccctc ttaatggatg tcatatctga MNSTLDGNQS SHPFCLLAFG YLETNFCLL HHTTSYFIQT MAYADLFVGV SCVPSLSLL HHPLPVEESL TCQIFGFVVS VLKSVSMASL P ACISIDRYIA ITRPLTYNTL VTPWRLRLCI FLIWLSTLV FLPSFFHWGK PGYHGDVDFQW CAESWHTDSY FTLFVMMLY APAALIVCFT YFNIFRICQQ HTKDISERQA RFSSQSGETG EVQACPDKRY AMVLFRITSV FYILWLPYII YFLESSTGH SNRFASFLT WLAINSNFCN CVIYSLNSV FQRLKRLSG AMCTSCASQT TANDPYTVRS KGPLNGCHI atgtgtttt cctccattct ggaatacaac atgcagctctg aatctaaccat tacagtgcga A gatgacattg atgacatcaa caccatattg taccacaccat tatcatatcc gttaaagcttt caagtgtctc tcaccggatt tcttatgtta gaaattgtgt tgggacttgg cagcaacctc actgtatttg tactttactg catgaaatcc aacttaatac actctgtcag taacattatt acaaatgaat tcatgtact ttagtgaata atttgtgtgg gatgtattcc ttaactata gttatccctc tgccttccat ggagagtaac actgtctccta ttgtctgttt ccatgaggct tgtgtatctt ttgcaagtgt ctcaacagca atcaacgttt ttgctatcac ttgggacaga tatgacatct ctgtaaaacc tgcaaaccca attctgacaa tgggcagagc tgtaattgt atgatatcca ttgtgatttt ttctttttt tctttcctga tctctttat tgaggtaaat	Homo sapiens
262	3859	G Protein- Coupled Receptor GPR22	NM_005295	atgaactcca ccttgtagtg taatcacagc agccaccctt ttgctctctt ggcatttggc A tatttggaaa ctgtcaattt ttgctctttt gaagtattga ttattgtctt tctaactgtt ttgattattt ctggcaacat cattgtgatt ttgtattttt actgtgcacc ttgttggaa catcacacta caagtatttt tatccagact atggcatatg ctgacctttt ttgtggggtg agctgcgtgg tcccttcttt atcaactctc catcaccccc ttccagtaga ggagtccttg acttgcaga tatttgggtt ttagtagtaca gtcttgaaga gcgtctccat ggccttcttg gcctgtatca gcatgtatag atacattgcc attactaaac ctttaacctt taatactctg gttacacctt ggagactacg cctgtgtatt ttcttgattt ggctatactc gacctggct ttctgcctt cctttttcca ctggggcaaa ctgacctgt ttccctctt gctatactc tgtgcggagt cctggcacac cgactctac ttccacctgt ttccagatgt gtttcagtg gccccagcag ccttattgt ctgcttcacc tatttcaaca tcttccgcat ctgccaacag cacacaaaagg atatcagcga aaggcaagcc cgcttcagca gccagagtgg ggagactggg gaagtgcagg cctgtcctga taagcgtat gccatggctc tgttctgaat cactagtgt ttttacatcc tctggttgcc atatatcatc tacttctgt ttgaaagctc cactggccac agcaaccgct tgcatactt cttgaccacc ttgcttgccta ttagtaaacg tttctgcaac tgtgtaattt atagtcttc caacagtgt ttccaaagag gactaaagc cctctcaggg gctatgtga cttctgtgc aagtcagact acagccaagc acccttacc agttagaagc aaaggccctc ttaatggatg tcatatctga aaagccctc ttaatggatg tcatatctga MNSTLDGNQS SHPFCLLAFG YLETNFCLL HHTTSYFIQT MAYADLFVGV SCVPSLSLL HHPLPVEESL TCQIFGFVVS VLKSVSMASL P ACISIDRYIA ITRPLTYNTL VTPWRLRLCI FLIWLSTLV FLPSFFHWGK PGYHGDVDFQW CAESWHTDSY FTLFVMMLY APAALIVCFT YFNIFRICQQ HTKDISERQA RFSSQSGETG EVQACPDKRY AMVLFRITSV FYILWLPYII YFLESSTGH SNRFASFLT WLAINSNFCN CVIYSLNSV FQRLKRLSG AMCTSCASQT TANDPYTVRS KGPLNGCHI atgtgtttt cctccattct ggaatacaac atgcagctctg aatctaaccat tacagtgcga A gatgacattg atgacatcaa caccatattg taccacaccat tatcatatcc gttaaagcttt caagtgtctc tcaccggatt tcttatgtta gaaattgtgt tgggacttgg cagcaacctc actgtatttg tactttactg catgaaatcc aacttaatac actctgtcag taacattatt acaaatgaat tcatgtact ttagtgaata atttgtgtgg gatgtattcc ttaactata gttatccctc tgccttccat ggagagtaac actgtctccta ttgtctgttt ccatgaggct tgtgtatctt ttgcaagtgt ctcaacagca atcaacgttt ttgctatcac ttgggacaga tatgacatct ctgtaaaacc tgcaaaccca attctgacaa tgggcagagc tgtaattgt atgatatcca ttgtgatttt ttctttttt tctttcctga tctctttat tgaggtaaat	Homo sapiens

263	3859	G Protein- Coupled Receptor GPR22	NP_005286.1	<p>tttttcagtc ttcaaaagtgg aaataacctgg gaaacaaaga cacttttatg tgtcagtaca aatgaatact aactgaact gggaatgtat tatcacctgt tagtacagat cccaatattc ttttcactg ttgtagtaat gtaatacaca tacaccaaaa tacttcaggc tcttaatat cgaataggca caagattttc acagggcag aagaagaaag caagaaagaa aaagacaatt tctctaacca cacaacatga ggtacagac atgtacaaa cagtggtgg gaaaaatgta gtctttggg taagaacttc agttctgtgta ataattgcc tccggcagc tgtgaaacga caccgtgaac gacgagaaag acaaaagaga gtcttcagga tgtctttatt gattattct acattcttc tctgtggac accaatttct gttttaaata ccaccatttt atgttaggc ccaagtacc ttttagtaaa attaagattg tgttttttag tcatggctta tggaacaa atatttcacc ctctattata tgcattcact agacaaaaat ttcaaaaggt cttgaaaa aaaaagaaa agcgagttgt ttctatagta gaagctgac ccctgcctaa taatgctgta atacacaact ctggataga tcccaaaaaga acaaaaaaaa ttacctttga agatagtga ataagagaaa aacgtttagt gctcaggtt gtcacagact ag</p>	Homo sapiens
				<p>MCFSP1EIN MQSESNTVR DDIDDINTNM YQPLSYPLSF QVSLTGFLML EIVLGLGSNL P TVLVLYCMKS NLINSVSNI TMNLHVLVDVI ICVGCIPLTI VILLLSLESN TALICCFHEA CVSFASVSTA INVEAITLDR YDISVKPANR ILTMGRAVML MISIWIFSFY SFLIPFIEVN FFSLQSGNTW ENKTLVCST NEYYTELGMY YHLLVQIPIF FFTVVVMLIT YTKILQALNI RIGTRFSTGQ KKKARKKKTII SLTQHEATD MSQSSGGRNV VFGVRTSVSV IIALRRRAVR HRERRERQKR VFRMSLLIIS TELLCTWTPIS VLNTTILCLG PSDLLVVKLRL CFLVMAYGTT IFHPLLYAFT RQEFQKVLKS KMKKRWVSIV EADPLPNNAV IHNSWIDPKR NKKITFEDSE IREKRLVPQV VTD</p>	
264	3860	G Protein- Coupled Receptor SLC/MCH1	NM_005297	<p>atgttgtgtc cttccaagac agatggctca gggcactctg gtaggattca ccaggaaact A catggagaag gaaaaggga caagattagc aacagtgaag ggaggagaa tggtaggaga ggattccaga tgaacggtgg gtcgctggag cgtgagcatg ccagcagatg gtcagttctc agagcaaaag ccatgtcaaa cagccaacgc ttgtctcttc tgctccagc atcacctctc cgcaacggga gcatctctca catcaacatc atcatgcctt cgggtgttcgg caccatctgc ctcctgggca tcatcgggaa ctccacggtc atcttcgagg tctggaagaa gtccaagctg cactgggtga acaacgtccc cgacatcttc atcatcaacc tctcggtagt agatctctc ttctcctgg gcatgccctt catgatccac cagctcatgg gcaatgggtt gtggcactt ggggagacca tgtgcacctt catcacggcc atggatgcca atagtcagtt caccagcacc tacatcctga ccgcatggc cattgacgc taccggcca ctgtccacc catctcttc acgaagtcc ggaagccctc tgtggccacc ttctgtgatc gctcctctg ggcctcttc ttcatcagca tcacccctgt gtggctgtat gccagactca tccctctcc aggaggtgca gtgggctgcg gcatacgcct gccaaccca gacactgacc tctactggtt caccctgtac cagtttttcc tggcctttgc cctgcctttt gtggtcatca cagccgcata cgtgaggata ctgcagcgca tgacgtctc agtggccccc gctcccccgc gcagcatccg gctgaggaca aagaggtga cccgcacagc catcgccatc tgtctggtct tctttgtgtg ctggggcacc tactatgtgc tacagctgac ccagttgtcc atcagccgcc cgacctcac ctttgtctac ttatacaatg cggccatcag cttgggctat gccaacagct gcctcaaccc ctttgtgtac atcgtgtctc gtgagacgtt ccgcaaacgc ttggtcctgt cggtagaagg tgcagcccag gggcaagctc gcgctgtcag caacgtctcag acggtgacg aggagaggac agaaagcaaa</p>	Homo sapiens

265	3860	G Protein- Coupled Receptor SLC/MCH1	NP_005288.1	ggcacctga MLCPSKTDGS RAKPMNSQR HWCNNVPDIF YILTAMADR VCGGIRLNP KRVTRTAIAI IVLCETFRKR	GHSGRIHQET LLLLSPGSP IINLSVVDLL YLATVHPISS DTDLYWFTLY CLVFFVCWAP LVLSVKPAAQ	HGEGKRDKIS RTGSISYINI FLMGPMFMH TKFRKPSVAT OFFLAFALPF YYVLQTLQLS GQLRAVSNAQ	NSEGRENGGR IMPSVFGTIC QLMNGVWHF LVICLLWALS VVITAAVYRI ISRPTLTFVY LYNAAISLGY TAEERTESK GT	GFQMNNGSLE LLGIIGNSTV GETMCTLITA FISITPVMWLY LQRTMTSSVAP LYNAAISLGY ANSCLNPFVY	AEHASRMSVL IFAVVKSKL MDANSQFTST ARLIPFPGGA ASQRSIRLRT ANSCLNPFVY	Homo sapiens
266	3861	G Protein- Coupled Receptor GPR25	NM_005298		atggccccca ttggacggcc tacatccccg gtgtggctgc ctggcggcag agggcgccgt acggcgctcg gtgaagctgc ggcgctgggg ccctggcctg ctcagcttgc tactggcgca tcgctggcga tcgctggcga gccttcgggg gccaacccgc gcctggcggc gacgacagtt tag	caagagccctg tggagagagt cgctctacct tggccggggc ctgacctggg ggcggcttcg cgggcgcgct tcgaggcgag ccgtggcgct ggggccaggga tgctgtgctg tctcgcgcgc tcctcttcgc ccgtcttcca tcgctgtggg tcattctacct gcacccggcg ccgtgttccg	gagcccccag ggagctgtgt ggcgcccttc gcggggcccc cttcgtgctc cgatggcctc gctgtgcgct gccactggcg gctggcgccg cagccagtgc gctggccctc cctgcgacgg catcgagagc cctggcgccg cctgacctat cctgtgtggc cctggcgcca tgcccgggcc	cgccctggga acctgacctc tgctgggcaa tggataacct tgtggcgccg tgactgttcg tggaccgcta gcgcctggcg tggtctaccg cctccacacg tggtcgtcac tgggtcgggc gctcctggct tgcccgctgc tgcccttcgt gagccccggg cagctccttc acactgcctc	ctactcgggg cggctacgtc cgctttgtg cgctgtgcac ggcgcgccgt gctggcgggc cctgtgtcgc gggtgtgcag cttccacggc cctctcttcg cggtcgggac gctgtccagg ggcctcctgg	Homo sapiens
267	3861	G Protein- Coupled Receptor GPR25	NP_005289.1	MAPTEPWSPS VWLLAGRRGP TRSAGALLLA PLPGQDSQC SLRIIFAIES ANPLIYLLD	PGSAPWDYSG RRLVDTFVLH GMSVDRYLAV GEEPSHAFQG TFVGSWLFPFS RSFRARALDG	LDGLEELELC LAAADLGFVL VKLLEARPLR LSLLLLLTTF ALRAVFHLAR ACGRTGRLAR	PAGDLPYGYV TLPWAAAAA TPRCAVASCC VLPLVVTLFC LGALPLPCPL RISSASSLSR	YIPALYLAAF RRPWPFGDGL GVWAVALLAG YCRISRRLRR LLALRWGLTI DDSSVFCRA	AVGLIGNAFV CKLSTFALAG LPSLVYRGLQ PPHVGRARRN ATCLAFVNSC QAANTASASW	Homo sapiens
268	3862	G Protein- Coupled Receptor GPR3	NM_005281		atgatgtggg gtaagcagcg aaggcctggg gtgggtggcca agcctggccg ttctgcatcg accgccaagca	gtgcaggcag tggggcccag atgtgtgtgt tcacgtgtgg tggcagacct gtcagcgga tcggcagctc	ccctctggcc agagggggcc ctgcatctca cactcctggc gctggcaggc gatgagcctg actggccatc	tggtctcag cggctccag caggtccag tgcctcggc ctgggcccc gtgctgttg actgtgcac	caactgaat gcctcgcct gaatgcgcta cctgtggggc tgctgtgtgc aatggccttt tctgtacaat	Homo sapiens

269	3862	G Protein-Coupled Receptor GPR3	NP_005272.1	<p>gacctcaact actattcaga gacacacagt gacaggacct atgtgatgct ggccttagtg</p> <p>tgaggaggtg cctgtggcct ggggtgctg cctgtgctg cctggaactg cctggatggc</p> <p>ctgaccacat gtggcgtggt ttatccactc tccaagaacc atctggtagt tctggccatt</p> <p>gccttcttca tgggtgtttg catcatgctg cagctctacg ccaaatctg ccgcatcgtc</p> <p>tgcgccatg ccagcagat tgccttcag cggcacctgc tgcctgcctc ccactatgtg</p> <p>gcaaccgca aggcattgc cacactggcc gtggtgctg gaggcttgc cgcctgctgg</p> <p>ttgcccctca ctgtctactg cctgtgggt gatgcccact ctccactct ctacacctat</p> <p>cttacctgc tccctgccac ctacaactcc atgatcaacc ctatcatcta cgccttcgc</p> <p>aaccaggatg tgcagaaagt gctgtgggt gctgtgctg ctgttctctc ttccaagatc</p> <p>ccctccgat cccgctccc cagtgtgct tag</p>	Homo sapiens
270	3863	G Protein-Coupled Receptor GPR31	NM_005299	<p>atgccattcc caaatgctc agccccagc actgtggtgg ccacagctgt ggggtgtctg A</p> <p>ctggggcttg agtgtggct ggtctgctg ggcaacgcgg tggcgtgtg gacctctctg</p> <p>ttccgggtca ggggtggaa gccgtacgt gtctacctg tcaacctggc cctggctgac</p> <p>ctgtgttgg ctgctgctt gcccttctg gcgccttct acctgagct caggcttgg</p> <p>catctgggcc gtgtgggctg ctgggcccgt cgttctctg tggacctcag ccgcagcgtg</p> <p>gggatggcct tccctggccg cgtggcttgg gaccggtacc tccgtgtggt ccacctcgg</p> <p>cttaagggtc acctgctgtc tccctaggcg gccctggggg tctcgggct cgtctggctc</p> <p>ctgatggctg cctcaactg cccgggcttg ctcatctctg agcccgccc gaactccacc</p> <p>agtgccaca gtttctact cagggcagc ggcctcttca gcatctctg gcaggaaaga</p> <p>ctctcctgcc ttcagtttgt cctccccctt ggcctctatg tgtctgcaa tgcaggcatc</p> <p>atcaggggctc tccagaaaaa actccgggag cctgagaaac agcccaagt tcagcgggccc</p> <p>caggcactgg tcaccttggg ggtggtgctg ttgtctctg ctttctgct cgtcttctg</p> <p>gccagagtcc tgatgcacat ctccagaaat ctggggagct gcaggccct ttgtcagtg</p> <p>gtctatacct cggatgtcac gggcagcctc acctacctg acagtgtcgt caacccctg</p> <p>gtatactgct tctccagccc cactctcagg agctcctatc ggagggtctt ccacacctc</p> <p>cagggcaaa ggcaggcagc agagccccca gatttcaacc ccagagactc ctattcctga</p> <p>LLLAACLPLF AAFVLSLQAW HLGRVGCWAL LGLECGLGLL GNAVALWTFE FRVRWKPYA VYLLNLALAD P</p> <p>LKVNLLSPQA ALGVSLVWL LMVALTCPLG LISEAQNST RCHSFYSRAD GSFSLIWEA</p> <p>LSCLQFVLPF GLIVFCNAGI IRALQKRLRE PEKQPKLQRA QALVTLVVVL FALCFPLPCFL</p> <p>ARVLMHIFQN LGSCRALCAV AHTSDVTGSL TYLHSAVNPV VYCFSSPTFR SSYRRVFHTL</p> <p>RGKGQAAEPP DFNPRDSYS</p>	Homo sapiens
271	3863	G Protein-Coupled Receptor GPR31	NP_005290.1	<p>gagggcaaa ggcaggcagc agagccccca gatttcaacc ccagagactc ctattcctga</p> <p>LLLAACLPLF AAFVLSLQAW HLGRVGCWAL LGLECGLGLL GNAVALWTFE FRVRWKPYA VYLLNLALAD P</p> <p>LKVNLLSPQA ALGVSLVWL LMVALTCPLG LISEAQNST RCHSFYSRAD GSFSLIWEA</p> <p>LSCLQFVLPF GLIVFCNAGI IRALQKRLRE PEKQPKLQRA QALVTLVVVL FALCFPLPCFL</p> <p>ARVLMHIFQN LGSCRALCAV AHTSDVTGSL TYLHSAVNPV VYCFSSPTFR SSYRRVFHTL</p> <p>RGKGQAAEPP DFNPRDSYS</p>	Homo sapiens
272	3864	G Protein-Coupled Receptor	NM_005282	<p>ctggtgacct tacttatctc tgttgcttctc tggggctccta ggaaatgcca gcaactccac A</p> <p>ccacattgcc tgaactttcc aacactccct agctgcgctg tgtcctatct caacacttcc</p> <p>tcatgtattt ctgtgtctct ctagaacatt cccccgcat tattacttca atatggctac</p>	Homo sapiens

GPR4

acatacttcc taattgacct gaaaccacc tccttctcac cattgcccag cgatgctttc
gtctctcca taaacttcc cggagaccaa tttttgtgtc acccccatat tccctcgttg
acacactgac tccatacata acctccttga aaaacctctt tattaatctc accatcctcc
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gaactcaagt gaagggaat cagggcagac tgcctggagg agtgatgcca gaaggtttg
gaagaagggt tgggacaaga agaagggtta ttatttcatt cattcaacag aggtttatgt
agggcactgt gctgggtggg gctgggggaca caacaatgac tgaggcagcc tggccttgc

273	3864	G Protein- Coupled Receptor GPR4	NP_005273.1	ttcacagggc tcaccatata caagtaaata aaaaatatgt aatgttttga attgct MGNHTWEGCH VDSRVDHLFP PSLYIFIVG GLPTNCLALW AAYRQVQRN ELGVYLMNLS P IADLYICTL PLWVDYFLHH DNWTHGPGSC KLFGEFIFTN IYISIAFLCC ISVDRYLA HPLRFARLR VMTAVAVSSV VWATELGANS APLEHDELEF DRYNHTFCE KPFMEGWAV NNLYRVFVGF LFPWALMLLS YRGILRAVRG SVSTERQEKI KIKRLALSLI AIVLVCFAPY HVLNLSRSAL YLGRPWDCGF EERFESAYHS SLAFTSLNCV ADPILYCLVN EGARSDVAKA LHNLRLFLAS DKPQEMANAS LTLETPLTSK RNSTAKAMTG SWAATPPSQG DQVQLKMLPP AQ	Homo sapiens
274	3866	G Protein- Coupled Receptor GPR6	NM_005284	atgaacgcga gcgcgcgcct gctcaacgac tcccaggtgg tggtagtgcc ggccgaagga A gcggcgccgg cgccacagc agcagggggg cggaacacgg gcgaatgggg accccctgct gcggcgccctc taggagccgg cgccggagct aatgggtctc tggagctgtc ctcgagctg tcggctgggc caccgggact cctgctgcca gcggtgaatc cgtgggacgt gctcctgtgc gtgtcgggga cagtgatgcg tggagaaac gcgctgggtg tggcgctcat cgcgtccact cggcgctgc gcaagcccat gtctgtgtg gtaggcagcc tggccaccgc tgacctgtg gcgggctgtg gcctcatctt gcactttgtg tccagtaact tggcgccctc ggagactgtg agtctgctca cgggtggcct cctcgtggcc tctctgccc cctctgtcag cagcctgctg gccattacgg tggaccgcta cctgtccctg tataacgcgc tcacctatta ctcgcgcgg accctgttgg gcgtgcacct cctgcttgc gccacttga cctgtccct agccctggg ctgtgcccgc tctgtggctg gaactgcctg gcagagcgc cgccctgcag cgtgggtgcg ccgtggcgc gcagccacgt ggtctgtctc tccgcgcct tctctatggt ctcgggcac atgtgcacc tgtacgtgcg catctgccag gtggtctggc gccacgcga ccagatcgcg ctgcagcgc actgcctggc gccaccccat ctcgctgcca ccagaaagg tgtgggtaca ctggctgtgg tcttggggcac tctcggcgc agctggctgc ccttcgcat ctattgctg gtgggcagcc atgaggacc cgcgggtctac acttacgcca cctgctgccc cgcacccac aactccatga tcaatcccat catctatgcc tccgcgaacc aggatccca gcgcgcctg tggctcctgc tctgtggctg tttccagtc aaagtgcct tctgttccag gtctccagc gaggtctga	Homo sapiens
275	3866	G Protein- Coupled Receptor GPR6	NP_005275.1	MNASAAASIND SQVVVAAEG AAAATAAGG PDTGEMGPPA AAALGAGGGA NGSLSSQL P SAGPPGLLLP AVNPWDVLLC VSGTVIAGEN ALVVALLIAT PALRTPMFVL VGSLATADLL AGCGLILHFV FOYLPSETV SLITVGFVA SFAASVSSL AITVDRLSL YNALTYYSRR TLGLVHLLA ATWTVSLGLG LLPVLGWNCL AERAACSVVR PLARSHVALL SAAFFMFGI MLHLYVRICQ VVWRHAHQIA LQHCCLAPPH LAATRKGVGT LAWLGTFGA SWLPFAIYCV VGSHPDPAV TYATLLPATY NSMINPIYA FRNQEIQRAL WLLLCGCFQS KVPFRSRSPS EV	Homo sapiens
276	3867	G Protein- Coupled Receptor GPR7	NM_005285	atggacaacg cctcgttctc ggagccctgg ccgccaacg catcgggccc ggaccggcg A ctgagctgct ccaacgcgtc gactctggcg cctgtgccc gcgcgctggc ggtggctgta ccagttgtct acgcggtgat ctgcgcctg ggtctggcg gcaactccgc cgtgctgtac gtgttctgc gggcgcccc catgaagacc gtaccaacc tgttcatcct caacctggcc atcgccgacg agctcttca cgtggtgctg cccatcaaca tcgcccactt cctgctgccc cagtggccct tccgggagct catgtgcaag ctatcgacca gtacaacacc	Homo sapiens

277	3867	G Protein- Coupled Receptor GPR7	NP_005276.1	<p>ttctccagcc tctacttctt caccgtcatg agcgccgacc gctacctggt ggtgttgccc actgcggagt cgcgcgggtt ggcggccgc acctacagcg ccgcgcgcgc ggtgagcctg gccgtgtggg ggatcgtcac actcgtcgtg ctgcccttcg cagtcttcgc ccggctagac gacgagcagg gccggcgcca gtgcgtgcta gtctttccgc agcccgaggc cttctggtgg cgcgagacc gcccttacac gctcgtgctg gctctgcga tcccgtgtc caccatctgt gtcctctata ccacctgct gtgcgggctg catgccatgc gctgggacag ccacgccaaag gccctggagc ggcccaagaa gccgggtgacc ttccctggtg ggcaatcct ggcggtgtgc ctcctctgct ggacgcccata ccacctgagc accgtggtgg cgctcaccac cgacctccc cagacgcgc tggtcacgc tatctctac ttcatcaca gccctgacga cgccaaacagc tgccccaacc ccttctctta cgccttctg gagccagct tccgcaggaa cctccgccag ctgataaact gccgcggcg agcctga</p>	Homo sapiens
278	3868	G Protein- Coupled Receptor GPR8	NM_005286	<p>MDNASFSEP PANASGPDPA LSCSNASTLA PLPAPLAV PVYAVICAV GLAGNSAVLY P VLLRAPRMKT VTNLFILNLA IADELFTLV PINIADFLR QWPFGLMCK LIVAIQYNT FSSLYFLTM SADRYLVVLA TAESRRVAGR TYSAARAVSL AVWGIVTLV LPFAVFARLD DEQRRRCVL VFPQPEAFWM RASRLYTLVL GFAIPVSTIC VLYTLLCRL HAMRLDSHAK ALERAKKRVT FLVVAILAVC LLCWTPYHLS TVVALTDLDP QTPLVIAISY FITSLTYANS CLNPFLYAFL DASFRNLKQ LITCRAAA</p>	Homo sapiens
279	3868	G Protein- Coupled Receptor GPR8	NP_005277.1	<p>atgcagcgc ctgggaccc agagccctt gacagcagg gctccttct cctccccacg A atgggtgcca agctctctca ggacaatggc actggccaca atggcaacct cctccagcca ctgcggttc tctatgtgct cctgcgcgc gtgtactccg ggaatctgct tgtggggctg actggcaaca cggcgctcat ccttgtaac taaggggcg ccaagatgaa gacggtgacc aacgtgttca tccctgaact gcccgctgcc gacgggctct tccagctggt actgcccgtc aacatcgcg agcactgct gcagtactgg ccttcgggg agctgctctg caagtgggtg ctggccgtcg accactaca catcttctcc agcatctact tctagccgt gatgagcgtg gaccgatac tgggtgtgct ggccaccgtg aggtcccgcc acatggccctg gcgcaacctac cgggggcgca aggtcgccag cctgtgtgct tggctggcg tccaggtcct ggttctgccc ttcttctctt tccgtggcgt ctacagcaac gactgacag tcccaagctg tgggctgagc ttcccgtggc ccgagcgggt ctggttcaag gccagccgtg tctacacttt ggtcctgggc ttcgtgctgc ccgtgtgca catctgtgtg ctctacacag acctcctgcy caggctgcgg gccgtggcg tccgctctgg agccaaggct ctaggcaagg ccaggcgga ggtgaccgtc ctggtccctg tccgtgtggc cgtgtgctc ctctgtgga cgcccttcca cctggcctct gtcgtggccc tgaccacgga cctgccccag accccactgg tcatcagat gtcctacgtc atcacagcc tccgtacgc caactcgtg ctagaacctt tctctacgc cttctagat gacaacttc ggaagaactt ccgcagcata ttgcggtgct ga</p>	Homo sapiens

280	3869	G Protein- Coupled Receptor HM74	NM_006018	<p> cgcacactttg ctggagcatt cactaggcga ggcgctccat cggactcact agccgcactc atgaatcggc accatctgca ggaactcttt ctggaatatg acaagaagaa ctgctgtgtg ttccgagatg acttcatttg caagtggttg cgcgcggtgt tgggcttgga gtttatcttt gggcttctgg gcaatggcct tgcctctgtg atttctgtt tccacctcaa gtcctggaaa tcagccgga ttttctgtt caactggca gtagctgact ttctactgat catctgcctg cggctcgtga tggactacta tggcggcgt tcagactgga actttgggga catcccttgc cggctgggtg tcttcatgtt tggcatgaac cgcagggga gcatcatctt cctcacggtg gtggcggtag acaggtattt ccgggtggtc catccccacc acgcccgtga caagatctcc aattggacag cagccatcat ctcttgctt ctgtgggga tcaactgttg cctaacagtc cacctcctga agaagaagt gctgatccag aatggccctg caaatgtgtg catcagcttc agcatctgca ataccttccg gtggcacgaa gctatgttcc tcttgagtt cctcctgccc ctgggcatca tctgttctg ctacagccaga attatctgga ccttgcgga gagacaaatg gaccggcatg ccaagatcaa gagagccatc acctcatca tgggtggggc catcgtcttt gtcatctgct tcttccccag cgtggttctg cggatccgca tcttctggct cctgcacact tcgggcacgc agaattgtga agtgtaaccg tcggtggacc tggcgttctt tatcactctc agcttcaact acatgaacag catgctggac ccggtggtt actacttctc cagcccatcc tttcccaact tcttctccac ttgtatcaac cgtgcctcc agaggaagat gacaggtgag ccagataata accgcagcac ggcgtcgag ctacacaggg acccaacaa aaccagaggc gtccagagg cgttaatggc caactccggt gagccatgga gcccctctta tctgggccc acctcaata accattccaa gaaggacat tgtaccacag aaccagcatc tctggagaaa cagttgggct gttgcacga gtaatgtcac tggactggc ctaagggttc ctggaacttc cagattcaga gaactgatt taggaaact gtggcagat agtggagac tgggttgaag gttgaccac aggaatcctg gaggaacaga gactaaagt tctaggcatc tgaacttgc ttcatctctg acgctcgag gactgaagat gggcaaatg tagcggttc gctgagcag agttggagcc agagatctac ttgtacttg ttggccttct tccacatct gctcagact ggggggggtc cagctcctg ggtgatatct agcctgcttg tgagctctag cagggataag gagagctgag attggaggga attgtgttg tccgtggagga agcccaggca tcattaaaca agccagtagg tcacctggct tccgtggacc aattcatctt tcagacaaagc tttagagaaa tggactcagg gaagagactc acatgcttg gtagtatct gtgttcccg tgggtgtaat aggggattag cccagaagg gactgagcta aacagtgtta ttatgggaaa ggaatggca ttgctgctt caaccagca ctaatgcaat ccattcctct cttgtttata gtaactctaa ggttgagcag ttaaaacgc ttcaggatag aaagctgtt cccacctgtt tctgtttacc attaaaagg aaacgtgct ctgccccacg gtagagggg gtgcacgttc ctcctgggtc ctcgctgtg gttctgtac ttacaaaaa tctaccact caataaattt tgataggaga caaaaaaaa a </p>	Homo sapiens
281	3869	G Protein- Coupled Receptor HM74	NP_006009.1	<p> MNRHLLQDHF LEIDKKNCCV FRDDFIKVL PPVLGLEFIF GLLNGGLALW IFCFHLKSWK P SSRIEFLNLA VADEFLILICL PFVMDYYVRR SDWNFGDIPC RLVLFMFAMN RQGSIIFLT VAVDRYFRV HPHALNKKIS NWTAAIISCL LWGITVGLTV HLLKKLLIQ NGPANVCISF SICHTFRWE AMFLEFLLP LGIILFCSAR IWSLRQRM DRHAKIKRAI TFIMVAIVE VICFLPSVV RIRIFWLLHT SGTONCEVYR SVDLAFFITL SFTYMSMLD PVYFFSSPS FPNFFSTLIN RCLQRKMTGE PDNNRSTSV EITGDPNKTRG APEALMANS G EPWSPSYLGP </p>	Homo sapiens

282	3870	G Protein- Coupled Receptor OGRI	NM_003485	TSNNHKKGH CHQEPASLEK QLGCCIE	atgggggaaca tcaactgcaga caactcctcg atgagctgta ccatcgacca taccatccac A cagacgtgg ccccggtggt ctatgttacc gtgctggtgg tgggcttccc ggcacactgc ctgtccctct acttcggcta cctgcagatc aagggccgga acgagctggg cgtgtacctg tgcaacctga cggtgggcga cctcttctac atctgtctgc tgccttctg gctgcagtac gtgtgcagc acgacaactg gtctcaaggc gacctgtct gccaggtgtg cggcatcctc ctgtacgaga acatctacat cagcgtgggc ttctctgct gcatctccgt ggaccgtac ctggctgtg cccatccctt ccgcttccac cagttccgga cctgaaggc ggcctgcggc gtcagcgtg tcatctgggc caaggagctg ctgaccagca tctacttctt gatgcacgag gaggtcatcg aggacgagaa ccagcacgc gtgtgcttg agcactatcc catccaggca tggcagcgc ccatcaacta ctaccgttc ctgtgggtt tctcttccc catctgctg ctgtggcgt cctaccaggg catcctgcgc gccgtgccc ggagccacgg caccagaag agccgaagg accagatcca ggcgtggtg ctcagcaccg tggatcatctt cctggcctgc ttctgacctt accagtggtt gctgctggtg cgcagctctt gggaggccag ctgcgactt gccaaaggcg ttttcaagc ctaccactt tccctctgc tcaccagctt caactgcgtc gccgacctg tgcctactg ctctgtcagc gagaccacc accgggacct ggcctgcctc cgcggggcct gcctggcctt cctcacctgc tccagagacc gccgggccc ggaggcctac ccgtgggtg ccccgaggc ctcgggaaa agcggggccc aggtgagga gcccgagctg ttgaccaagc tccaccggc cttccagacc cctaacctgc cagggtcggg cgggttcccc acgggcaggt tggcctag	Homo sapiens
283	3870	G Protein- Coupled Receptor OGRI	NP_003476.1	MGNITADNSS MSCTIDHTIH QTLAPVVYVT VLVGFPANC LSLYFGLQI KARNELGVYL P CNLTVDLFY ICSPFLWLQY VLQHDNWSHG DLSCQVCGIL LYENIYISVG FLCCISVDRI LAVAHFPRFH QFRTLKAAGV VSVVIWAKEL LTSIYFLMHE EVIEDENQHR VCFEHPYIQA WQRAINYYRF LVGFLFPICL LLASYQGILR AVRRSHGTQK SRKDIQRLV LSTVVFILAC FLPYHVLILV RSVWEASCDP AKGVFNAYHF SLLLTSENCV ADPVLVCFVS ETRHDLARL RGACLAFLTC SRTGRAREAY PLGAPEASGK SGAQGEPEL LTKLHPAFQT PNSPGSGGFP TGRLA	Homo sapiens	
284	3921	Prostacyclin Receptor	NM_000960	agcaagtga ggcacagacg caggggacag gagagcctg gcaagactgg agagccaga A cctgggatgg cggattcgtg caggaacctc acctactgc gggctcgggt gggcccgcc accagcacc tgatgttctg ggcgggtg gtgggcaacg ggtggccct gggcatcctg agcgacggc gacggcgcg cccctggcc ttccggtgc tggtaaccg actggcgcc accgacctg tgggacctg cctctgagc ccggcctgt tctgggcta tgcgcgcaac agctccctg tgggacctg ccgagggcg cccgccctg gcatgacctt cgccttcgcc atgaccttct tcggcctggc gtccatgtc cctctactgc cagctggagc ggcctgctg ctggcgctga gccacctta cctctacgc cctctgctc tcttctgcg cgtggcctg gcgtgcccag ccatctacg cctctacgc cctctgctc tcttctgcg cgtggcctg ggccaaacc agcagtactg ccccgagc tgggtcttc tccgcatgc ctgggcccag ccgggcgggc ccgccttctc gctggcctac gccggcctg tggcctgct ggtggctgc atcttctctt gcaacggctc ggtcacctc agcctctgc ccatgtacc ccagcagaag cgccaccag gctctctggg tccacggcg cgcacggag aggacaggt ggaccacctg	Homo sapiens	

285	3921	Prostacyclin NP_000951.1 Receptor	atctgtgtgg ccctcatgac agtgggtcatg gccgtgtgtg cctgtgctct cactgacccg tgcttcaacc aggtgtgctg cctgacagc agcagtgaga tgggggacct ccttgcccttc cgcttctacg ccttcaacc catctggac cctgtggtct tcatcctttt ccgcaaggct gtcttccagc gactcaagct ctgggtctgc tgcgtgtgct tgggacctgc ccacggagac tcgcagacac ccttttccca gctgcctcc gggaggaggg acccaagggc cccctctgct cctgtgggaa aggaggggag ctggtgctct ttgtcggtt gggcgaggg gcaggtggag cccttgctc ccacacagca gtcagcggc agcgccgtg gaaactcgtc caaagcagaa gccagcgtc cctgtctcct ctgctgacat ttcaagctga cctgtgatc tctgccctgt cttcggggcga caggagccag aaaaatcaggg acatggctga tggctgctga tgcgtgaacc ttggccccc aactctggg ccatcagct gctgtttctc ctgcggcagg gcagtcgctg ctggctctgg gaagagagtg agggacagag gaaacgttta tcttgagtg cagaaagaat ggttctctca aataaaccag tggcctggcc gacctgctc ggcctggat tccccatcca tctcattgtc taaatattta gaaggcggag aagttccag aggttctgt acagtcaggt ctgctctggt ctgggtgtg gctccaatct ggtccactt aggagggcca actgcccacc ccaaatcccc aggggatgg cctccccctc taccagaaca ctccaagagc cagccccctt tctgtccac aaaaaccaca gttattggaa aagctccctg ccttcccttg ccgctgttcc cccaccaggc ttgggagccc tggcatccca agggggcaac gggagggaagg ggaggtgct gcattgtggg tgatgacgta ggacatgtgc ttggtacaaa agggcctga gacattccac ct	Homo sapiens
286	3923	Prostaglandin U31099 n D2 Receptor	gctgtgcaac ctgggcgcca tgcgcaacct ctatgcgat caccggcggc tgcagcggca A cccgctcc tgcaccaggg actgtgccga gccgcgcgc gacgggaggg aagcgtcccc tcagccccctg gaggagctgg atcaacctct gctgctggcg ctgatgaccg tgcctttcac tatgtgtct ctgcccgtaa tttatcgcg ttactatgga gcatttaagg atgtcaagga gaaaaacagg acctctgaag aagcagaaga cctccgagcc ttgcgatttc tatctgtgat ttcaattgtg gaccttgga tttttatcat tttcagatct ccagtatttc ggatattttt tcacaagatt ttcattagac ctcttaggta caggagcccg tgcagcaatt ccactaacat ggaatccagt ctgtgacagt gtttttact ctgtggttaag ctgaggaata tgtcacattt tcagtcacaa aacca	Homo sapiens
287	3923	Prostaglandin Q13258 n D2 Receptor	mkspfyrcqn tttveknsa vmggvlfstg llgnllalgl larsglgwcs rrlrlplsv P fymlvcltv tdlgkclls pvlalayaqn rslrilaal dnslcqaaf fmsffglst lqlamaalec wslghpffy rrlhtrlga lvapvsaes lafcalfmg fgkfvqyapc twcfiqmve egslsvlgs vlysslmall vlatvlcnlg amrnlyamhr rlqhrprsc rdcaepradg reaspqlee ldhllllalm tvlftmcslp viyrayygaf kdvrknrt eeaedlralr flsvsisvdp wififrspv friffhkifi rplrysrscs nstnmessl	Homo sapiens

288	3924	Prostaglandin E Receptor EP1	NM_000955	<p> ggggggcgca ggggtgagcg gccgtgatg gggaccacac atcccaggca gtgcccggcac ccctggcgcc tgacatgagc ccttgcgggc cctcaaacct gagcctggcg ggcgagggca ccacatggcg ggcgcccctg gtcccaaca cgtcccgctg gccgcccctg ggcgcttcgc ccgctgccc catctctccc atgacgctg gcgcgctg caacctgctg gcgctggcgc tgctggcgca ggcgcggggc cgcctgcgac gccgcgctc ggcaccacc ttcctgctgt tcgtggccag cctgctggcc accgacctg cggggccagt gatccgggc gcgctggctg tgctctgta cactgcgggg cgcgtcccg cggcggggc ctgccacttc ctggcgggct gcatggtctt cttcgccctg tgcccctgc tgcctccac cgcgcgggt ctcgctgccc gtggagcgt gcgtggcgt cagcgggcg cgtctccac cgcgcgggt ctcgctgccc cgcgcgcgc tggcgctggc cgcgtggcc cgggtggct tgccgctggc gctgctgccc ctggcgcgcg tgggccgcta tgagctgcag taccgggca cgtggtgct catcgccctg ggtcccccgg gggctggcg ccaggcaactg cttgctggc tctggccag cctggccctg gtcgcgtcc tcgcgcgct ggtgtgcaac acgtcagcg gctggccct gcctcgccgc cgtggcgac gcgcctccg acggcctccc cggcctcag ccccgacag ccggcgctgc tggggggcgc acggacccc ctcggcctcc gcctcgtcc cctcgtccat cgttcggcc tccacctct ttggcggtc tcggagcagc ggctcgccac gcagagctcg cggccacgac gtggagatgg tgggccagct tgcggtatc atggtggtg cgtgcctg ctggagccca atgctggtgt tggtggcgt ggcgctggc ggctggagct ctacctcct gcagcgccca ctgttcctgg ccgtgcgct tgcctcctgg aaccagatcc tggacccttg ggtgtacatc ctactgcgc aggcgtgct gcgcaactg cttcgccct tggcccccag ggccggagcc aagggcgggc ccgcggggt gggcctaaca ccgagcgct cggagggcag ctcgctgccc agctcccggc acagcgccct cagccacttc taagcacaac cgtgtaagc agcctaagc cagcccaacc tggtgctggc ccaggtgccc ggcgcagagc cttgggaat aaaaagccat tctgcg </p>	Homo sapiens
289	3924	Prostaglandin E Receptor EP1	NP_000946.1	<p> MSPCGPLNLS LAGEATTCAL PWVNTSAVP PSGASPALPI FMSLGVASN LLALALLAQA P AGRLRRRRA TTFLLFVASL LATDLAGHVI RPLHAAVRS VARARLALAA VAAVALAVAL LPLARVGRYE GLCPLLLGCG MAVERCVGVT RPLHAAVRS VARARLALAA VAAVALAVAL LPLARVGRYE LQYPGTWCFI GLGPPGGWRQ ALLAGLFASL GLVALLAALV CNTLSGLALH RARWRRRRR PPASGPDSR RRGAGHGRS ASASSASSIA SASTFFGGRS SSGSARRARA HDVEMVQQLV GIMVSCICW SPMLVLVALA VGGWSSTSLQ RPLFLAVRLA SWNQILDPIV YILLRQAVLR QLLRLLPPRA GAKGGPAGLG LTPSAWEASS LRSSRHSGLS HF </p>	Homo sapiens
290	3925	Prostaglandin E Receptor EP2	NM_000956	<p> gggcccgcgt cggcgcgctg ggtgcgggaa gggggctctg gatttcggtc cctccccctt A ttcctctgag tctcggaag ctcagctct cagacctct tctcccagg taaaggccgg gagaggagg cgcactctt tccaggcac cccacctag gcaatgctc caatgactcc cagtctgag actcgagac gcagagtggt cttccccag gcgaagccc agccatcagc tcgctcatgt tctcgccgg gggtctgggg aacctcatg cactggcgt gctggcgcc cgctggcgg gggacgtgg gtgcagcgc gccgcagga cctccctc cttgttccac gtgctggtga ccgagctggt gttcaccgac ctgctcgga cctgcctcat cagccagtg gtactggctt cgtacgcgc gaaccagacc ctggtggcac tggcgccga gacgcgcgc tgacactact tgccttccg catgaccttc ttcagcctgg ccagatgct catgctctc gccatggccc tggagcgcta cctctcgatc gggcacccct acttctacca gcgcgcgctc tcggcctccg ggggcctggc cgtgctgctc gctctctatg cagctcctc gctctctgc </p>	Homo sapiens

291	3925	Prostaglandin E Receptor EP2	NP_000947.1	tgctgcgc tgctggacta tgggcagtag ctccagtagt gcccgggac ctggtgtctt atccggcag ggcggaccgc ttacctgcag ctgtacgcca cctctgtgct gcttctcatt gtctcggtgc tgcctgcaa cttcagtgct attctcaacc tcatccgcat gcaccgccga agccggagaa gccgctgcgg acctccctg ggcagtgccc gggcgccgc agcgccgc aggagaggg aaaggtgtgc catggcgag gagacggacc acctcattct cctggctatc atgaccatca ccttcgcgt ctgtccctg ccttcacga ttttgcata tatgaatgaa acctctccc gaaaggaaaa atgggacctc caagctctta ggtttttatc aattaattca ataattgacc cttgggtctt tgccatcctt aggcctcctg ttctgagact aatgcgttca gtccctgtt gtccgatttc attaaagaca caagatgcaa cacaaacttc ctgttctaca cagtcagatg ccagtaaaaca ggctgacctt tgaggtcagt agtttaaaag ttcttagtta tatagcatct ggaagatcat ttgaaaattg ttccctggag aatatgaaaac agtgtgtaaa caaatgaag ctgccctaata aaaaaggagt atacaaacat ttaagctgtg gtcaaaggcta cagatgtgct gacaaggcac ttcatgtaaa gtgtcagaag gagctacaaa acctaccctc aatgagcatg gtacttgccc ttggaggaa caatcgctg cattgaagat ccagctgcct attgatttaa gctttcctgt tgaatgaaa agtatgtgtg ttgttaattt gtttgaacc ccaaacagtg actgtacttt ctattttaat ctgtctacta cgtttataca catatagtgt acagccagac cagattaaac ttcatatgta atctctagga agtcaaatg tggaaagcaac caagcctgct gtcttgtgat cacttagcga accttttatt tgaacaaatga agttgaaaaat cataggcacc ttttactgtg atgtttgtgt atgtggagat actctcatca ctacagtatt actcttaca gagtgactc agtgggttaa catcagtttt gtttactcat cctccaggaa ctgcaggtca agttgtcagg ttatttattt tataatgtcc atatgctaag agtgatcaag aagacttag gaatggttct ctcaacaaga aataatagaa atgtctcaag gcagtttaatt ctcaataata ctcttattat cctatttctg ggggagtagt tacgtggcca tgtatgaagc caaatattag gcttaaaaaa tgaaaaatct ggttacttct tcagatatac tggaaacctt ttaaaagttga tattggggcc atgagtaaaa tagattttat aagatgactg tgttgtagca aaattcatct gtctatattt tatttagggg aacatggttt gactcatctt atatgggaaa ccatgtagca gtgagtcata tcttaataa ttctaaaatg ttggtcatgt aaatgtataac tcagcatcaa aatatttcag tgaatttgca ctgtttaatc atagtactg tgtaaactca tctgaaatgt taaaaaata aactataaaa ca	Homo sapiens
292	3926	Prostaglandin E2 Receptor EP3	L32662	RSSLSLFHVL VTELVFTDLL GTCLISPVVL MFSAGVIGNL IALALLARRW RGDVGCsAGR P LATMLMFLM ALERYLSIGH PFYQRRVSA SGGLAVLPVI YAVSLIFCSL FLDDYGQYVQ YCPGTWCfir HGRtAYLQly VLACNFSVIL NLIRMHRRSR RSRCGPSSLGS GRGGPGARRR GERVSMAEET DHLILLAIMT ITFAVCSLPF TIFAYMNETS SRKEKWDLQA LRFELSINSII DPWFALIRP PVILIRMSVL CCRISLRTQD ATQTSCTQS DASKQADL atgagaaaaa gaagactcag agagcaagag gaattttggg gaaataaa	Homo sapiens
293	3926	Prostaglandin E2 Receptor EP3	NM_000957	accagaggtt tcccagagag gaaggcgtgg ctccctcccg ggccagtgag ccttgccgcc gcccgcccg cggtcccagc agcgagtag ggcggcggt gcgcccgc caatggggg cagcccagc ccagcgcg ctaacgccga cctccgcgc gcgccgcgc gcgtctgccc	Homo sapiens

294	3926	Prostaglandin E2 Receptor EP3	NP_000948.1	<p> cctccccgtg cggctctctg gacgccatcc cctcctcacc tcgaagccaa catgaaggag acccggggct acggagggga tgcccccttc tgcccccgcc tcaaccactc ctacacaggc atgtgggcgc ccgagcggtc cgggagggc cggggaacc tcaacgcccc tccagggtct ggcagagatt cggatcggt gtcgctggcc tccccgatca ccatgctgct cactgggttc gtgggcaacg cactggccat gctgctcggt tggctggcgc accggcgccg ggagagcaag cgcaagaagt ccttcctgct gtgcatcgcc tggtcgccgc tcaccgacct ggtcgggcag ctctcacca ccccggtcgt catcgctgtg tacctgtcca agcagcggtg ggagcacatc gaccgctcgg ggcgctctg caactttttc gggtgacca tgactgtttt cgggctctcc tcgttgttca tcgccagcgc catggccgtc gaggggcgc tggccatcag ggcgccgcac tggtatgcga gccacatgaa gacgcgtgcc acccgcgctg gccagtacac cgtccagtgg gccgtgctcg ccttcgacct gctgccggtg ctggcgctgg gccagtacac cgtccagtgg cccgggacgt ggtccttcac cagcacccgg cggggggcca acgggactag ctcttcgcat aactggggca accttttct cgcctctgcc ttggccttcc tggggtctct ggcgtgaca gtcacctttt cctgcaacct ggccacctt aaggccctgg tgtcccgtg ccggggccaa gccacggcat ctcagtcag tgcccagtg ggccgcatca cgaccgagac ggcattcag cttatgggga tcatgtcggt gctgtcggtc tgctgggtcc cgtcctctgat aatgatgtt aaaatgatct tcaatcagac atcagttgag cactgcaaga cacacacgga gaagcagaaa gaatgcaact tcttctaat agctgttcgc ctggcttcac tgaaccagat ctgggactct tgggtttacc tgctgttaag aagatcctt ctctgaaa tttgccagat gagaaaaaga agactcagag agcaagat gggccctgat ggaaggtgtt tttgtcatgc atggaggcag gtccccagga ctggtgtcag ttctcatgat agagaacctt gcagtgtcca gctaaagctga tgacttgag ataatctgc ctacccttg gatgaagtat ctgtgaaacta ttttgacagc agatgaggaa ttttggggaa attaaaacct gcttcttcgc caggatcaca tcaactggaag ctccatgact ctctttttgt aaaagaaaaa aaaaatcacag aaacacccac tccccaaact attctctttt acttcttccc ccaagccac ccccaaatat aactgttctc cagaagctgt tatgtcctgt ttccatacat gttttgtac ttttactata tctacataca tcaattaaac ttatgtccta ttgtttttgt aatttatatt tgcgtatata ttatcatatg taaaatttgc atctttttat tgaataattat gtttcttgag atttatccac attgaaacat ggagctctaa atcggttaatt ttaaccgcta tagagtattc cataatttga ataaagcata atttgtttgt ac </p>	Homo sapiens
295	3927	Prostaglandin E4 Receptor EP4	NM_000958	<p> cctccccgtg cggctctctg gacgccatcc cctcctcacc tcgaagccaa catgaaggag acccggggct acggagggga tgcccccttc tgcccccgcc tcaaccactc ctacacaggc atgtgggcgc ccgagcggtc cgggagggc cggggaacc tcaacgcccc tccagggtct ggcagagatt cggatcggt gtcgctggcc tccccgatca ccatgctgct cactgggttc gtgggcaacg cactggccat gctgctcggt tggctggcgc accggcgccg ggagagcaag cgcaagaagt ccttcctgct gtgcatcgcc tggtcgccgc tcaccgacct ggtcgggcag ctctcacca ccccggtcgt catcgctgtg tacctgtcca agcagcggtg ggagcacatc gaccgctcgg ggcgctctg caactttttc gggtgacca tgactgtttt cgggctctcc tcgttgttca tcgccagcgc catggccgtc gaggggcgc tggccatcag ggcgccgcac tggtatgcga gccacatgaa gacgcgtgcc acccgcgctg gccagtacac cgtccagtgg gccgtgctcg ccttcgacct gctgccggtg ctggcgctgg gccagtacac cgtccagtgg cccgggacgt ggtccttcac cagcacccgg cggggggcca acgggactag ctcttcgcat aactggggca accttttct cgcctctgcc ttggccttcc tggggtctct ggcgtgaca gtcacctttt cctgcaacct ggccacctt aaggccctgg tgtcccgtg ccggggccaa gccacggcat ctcagtcag tgcccagtg ggccgcatca cgaccgagac ggcattcag cttatgggga tcatgtcggt gctgtcggtc tgctgggtcc cgtcctctgat aatgatgtt aaaatgatct tcaatcagac atcagttgag cactgcaaga cacacacgga gaagcagaaa gaatgcaact tcttctaat agctgttcgc ctggcttcac tgaaccagat ctgggactct tgggtttacc tgctgttaag aagatcctt ctctgaaa tttgccagat gagaaaaaga agactcagag agcaagat gggccctgat ggaaggtgtt tttgtcatgc atggaggcag gtccccagga ctggtgtcag ttctcatgat agagaacctt gcagtgtcca gctaaagctga tgacttgag ataatctgc ctacccttg gatgaagtat ctgtgaaacta ttttgacagc agatgaggaa ttttggggaa attaaaacct gcttcttcgc caggatcaca tcaactggaag ctccatgact ctctttttgt aaaagaaaaa aaaaatcacag aaacacccac tccccaaact attctctttt acttcttccc ccaagccac ccccaaatat aactgttctc cagaagctgt tatgtcctgt ttccatacat gttttgtac ttttactata tctacataca tcaattaaac ttatgtccta ttgtttttgt aatttatatt tgcgtatata ttatcatatg taaaatttgc atctttttat tgaataattat gtttcttgag atttatccac attgaaacat ggagctctaa atcggttaatt ttaaccgcta tagagtattc cataatttga ataaagcata atttgtttgt ac </p>	Homo sapiens

296	3927	Prostaglandin E Receptor EP4	NP_000949.1	<p> tccagactga gcaggacaag gtgaaagcag gttggaggcg ggtccaggag atctgagggc tgacctggg gctcgtgag gctgcaccg ctgctgcgc tacagacca gccttgcaat ccaaggctgc gcaccgccg cactatcat gtcactccc ggggtcaatt cgtccgcctc cttgagcccc gaccggctga acagcccagt gaccatccc gcggtgatgt tcatcttcgg ggtggtgggc aacctggtg ccatsgtgt gctgtgcaag tcgcgaagg agcagaagga gagaccttc tacacgtgg tatgtgggt ggtgtcacc gacctgtgg gcactttgtt ggtgagcccc gtgaccatcg ccacgtacat gaagggcaa tggcccggg gccagccgct gtgcgagtac agcaccttca ttctgtctt cttagcctg tccggcctca gcatcatctg cgccatgagt gtcgagcgt acctggccat caacctgct tttttaca gccactacgt ggacaagcga ttggcgggcc tcacgtctt tgagctctat cgttccaacg tgcctttttg cgctgctccc aacatgggtc tcggtagctc gcggctgcag taccagaca cctggtgctt catcgactgg accaccaag tgacggcgca cgcgcctac tctacatgt acgcgggctt cagctccttc ctattctcg ccacgtctc ctgcaacgtg cttgtgtgctg gcgctgct cgcgatgcac cgccagtcca tgcgcgcac ctgctgggc accgagcagc accacgcggc cgcgccgcc tcggttgct cccggggcca ccccgctgc tccccagct tgcgcgct cagcgaattt cggcgccgc gtagcttcg cgcctgcg gcgcgcaga tccagatggt catcttactc attgccact cctggtggt gctcatctgc tccatccgc tctggtgctg agtattctc aaccagttat atcagccaag ttggagcga gaagtcagta aaaaaccaga tttgaggcc atccgaattg ctctgtgaa ccccatccta gaccttga tatatactt cctgagaaag acagtgtca gtaagcaat agagaagatc aaatgcctt tctgcgcct tgccgggtcc cgcaggagc gtcgggaca gcaactgtca gacagtcaaa ggacatctc tgccatgtca ggcactctc gctcttcat ctccgggag ctgaaaggaga tcagcagtag atctcagacc ctctgccag acctctcat ggcagacct agtgaataat gccttgagag caggaatttg ctccagggt tgcctggcat ggcctggcc caggaagaca ccactcact gaggacttg cgaatatac agacctcaga ctcttcacag ggtcaggact cagagatgt cttactggtg gatgaggtg gtgggagcgg cagggtggt cctgccccta aggggagctc cctgcaagtc acatttcca gtgaacact gaacttata gaaaaatgta tataataggc aaggaaagaa atacagtact gttctggac cttataaaa tctgtgcaa tagacacata catgtcacat ttagctgtgc tcagaaggcg tatcatca LAVTDLLGTL LVSPVTIATY MKGQWPGGQP LCEYSTFILL FFSLSGLSII CAMSVERYLA INHAYFYSHY VDKRLAGLTL FAVYASNVLF CALPNMGLGS SRLQYPTDTC FIDWTTNVT HAAYSVMYAG FSSFLILATV LCNVILVCGAL LRMHRQFMRR TSLGTEQHHA AAAASVASRG HPAASPALPR LSDFRRRRSF RRIAGAEIQM VILLIATSLV VLICSIPLVW RVFNQLYQP SLEREVSKNP DLQAIRASV NPILDPIYI LLRKTIVLSKA IEKIKLFCR IGGSRRRSG QHCSDSQRTS SAMSGHSRSF ISRELKEISS TSQTLPLDLS LPDLENGLG GRNLLPGVPG MGLAQEDTTS LRTLRISETS DSSQGDSES VLLVDEAGGS GRAGPAPKGS SLQVTFPSET LNLSKCI </p>	Homo sapiens
297	3928	Prostaglandin F2-alpha Receptor	NM_000959	<p> ggcgcggggc gccatggcac accgagcggc tccgtcttct gctcctcaga gagcccgct A ggcgccctgg gatgacaaga tgtctggact gcaatcctgc acagtttga gagggagatg acttgagtgg ttggctttta tctccacaac aatgtccatg aacaattcca aacagctagt </p>	Homo sapiens

gtctcttgca gctgcgcttc ttcaaacac aactggccag acggaaaacc ggctttccgt
atctttttca gtaatcttca tgacagtggg aatcttgtca aacagccttg ccacgcctat
tctcatgaag gcatatcaga gatttagaca gaagtcocaa gcatcgtttc tgcttttggc
cagcgccctg gtaatcactg atttctttgg ccattctcat aatggagcca tagcagtatt
tgtatatgct tctgataaag aatggatccg ctttgaccaa tcaaatgtcc ttgacagtat
tttgggtatc tgcattgggt ttctgtgtct gtcgccatt cttctaggca gtgtgatggc
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cttagccctt ggtgtttcat tgtgtgcaa tgcaatcaca ggaattacac ttttaagagt
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tgtccttaag aatctctata agcttgccag tcaatgctgt ggagtgcag tcatcagctt
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tttggccctc attgtgtagc ctcaattaac acatgcatgg tcatgacac cagaattcat
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tggcaaaaagg tgttttacct tgagccatta ttgtgttcag agaaacaaag aaacagaatc
aatatataaa ttcaaaagct atctgcagct agtgtgttcc tcttttacac acatatacac
acagacatca gaaaattctg ttgagagcag gtctcataaa ttgtgtaagat ggcataattct
aaagcctgtg ctaccagtac taagagggga agactggcaa ttgtccaaag acttggggat
tattataaca attaactagg agatcaagag ataataatct ctcccaaat tttccaataa
taattgagac tttttctttg cttgtttgtg taattcaacc aaaagaattt caatacccat
tcaaatgtgc ctaggctcat cagaaattag ggaaggttag cctgttttat aataggaaaa
tgtatttctg tataagattt ctttgctttc attaaaaatg ggattcattt aaaaattaat
ctttccctgt taggtgatt tcagattctc taggaaatct ggtgaagtaa ccagaagact

298	Prostaglandin F2-alpha Receptor	NP_000950.1	3928	MSMNNSKQIV SPAAALLSNT TCQTENRLSV FFSVIFMTVG ILSNSLIAIAI LMKAYQRFRO P	Homo sapiens
				KSKASFLLLA SGLVITDFFG HLINGAIAVF VYASDKIEWIR FDQSNVLCSEI FGICMVFSGL	
				CPLLLGSVMA IERCIGVTKP IFHSTKITSK HVKNMMLSGVC LFAVFIALLP ILGHRDYKIQ	
				ASRTWCYNT EDIKDWEDRF YLLLFSLGL LALGVSLCN AITGITLLRV KFKSQHRQG	
				RSHLEMTIQ LLAIMCVSCI CWSPFLVTMA NIGINGNHSI ETCETTLFAL RMAWNOILD	
				PWVYILLRKA VLKNLYKLAS QCCGVHVISL HIWELSSIKN SLKVAAISES PVAEKSAST	
299	Proteinase-Activated Receptor 2	NM_005242	4051	cggcccgccc tggggaggcg cgcagcagag gctccgattc ggggcagggtg agaggctgac A	Homo sapiens
				ttctctcgg tgcgtccagt ggagctctga gtttcgaatc ggtggcggcg gattccccgc	
				gcgcccggcg tggggcttc caggaggatg cggagcccca gcgcggcgtg gctgctgggg	
				gcgccatcc tgcctagcgc ctctctctcc tgcagtgaggc ccatccaaagg aaccaataga	
				tcctctaag gaagaagcct tattggtaag gttgatggca catccacgt cactggaaaa	
				ggagttacag ttgaacacgt cttttctgtg gatgagtttt ctgcatctgt cctcactgga	
				aaactgacca cggctctcct tccaatgtgc tacacaattg tgtttgtggt gggtttgcca	
				agtaacggca tggccctgtg ggtctttctt ttccgaacta agaagaagca cctgctgtg	
				attacatgg ccaatctggc cttggctgac ctctctctctg tcatctggtt ccccttgaag	
				attgcctatc acatacatgc caacaactgg atttatgggg agctctcttg taatgtgctt	
				attggctttt tctatggcaa catgtactgt tccattctct tcatgacctg cctcagtggtg	
				cagaggatatt gggctatcgt gaaccccatg gggcactcca ggaagaaggc aaacattgcc	
				attggcatct ccttggaat atggctgctg attctgctgg tcaccatccc ttgtatgtgc	
				gtgaagcaga ccatcttcat tccctgcccgt aacatcacga cctgtcatga tgttttgcc	
				gagcagctct tgggtggaga catgttcaat tacttctct ctctggccat tggggctctt	
				ctgttcccag ccttctctac agcctctgct tatgtgctga tgcacagaat gctgcgatct	
				tctgcccattg atgaaaactc atgactctgt atgactctgt aggaagaggg ccatcaaaact cattgtcact	
				gtcctggcca tgtactctgt ctgcttctact cctagttaacc ttctgcttgt ggtgcattat	
				ttcttgatta agagccaggg ccagagccat gtctatgcc ttgtacattgt agccctctgc	
				ctctctacc ttacagctg cctgacccc ttgtctctat actttgtttc acatgatttc	
				agggatcatg caaagaacgc tctcctttgc cgaagtgtcc gcactgtaaa gcagatgcaa	
				gtatccctca cctcaaaaga acactccagg aaatccagct cttactcttc aagttcaacc	
				actgttaaga cctcctattg agttttccag gtccctcagat gggaattgca cagtaggatg	
				tggaacctgt ttaatgttat gaggacgtgt ctgttatttc ctaatacaaa aggtctcacc	
				acataccacc g	
300	Proteinase-Activated Receptor 2	NP_005233.2	4051	MRSPSAWLL GAAILLAAASL SCSGTIQGTN RSSKGRSLIG KVDGTSHTVG KGVTVETVFS P	Homo sapiens
				VDEFSASVLT GKLTIVFLPI VYTVFVUGL PSNGMALWVF LFRTKKKHPA VIYMANLALA	

Receptor 2

301 4052 Proteinase- Activated Receptor 3 NM_004101

DLLSVIWEPL KIAYHIHANN WIYGEALCNV LIGFFYGNMY CSILFMTCLS VQRYWVIVNP
 MGHSRKRANI AIGISLAIWL LILLVTIPLY VKQOTIFIPA LNIITCHDVL PEQLLVGDMF
 NYFLSLAIGV FLPPAFLTAS AYVLMIRMLR SSAMDENSEK KKKRAIKLIV TVLAMYLICF
 TPSNLLLVVH YFLIKSQGS HVYALYIVAL CLSTLNSCID PFVYFVSHD FRDHAKNALL
 CRSVRTVKQM QVSLTSKKHS RKSSSYSSSS TTVKTSY

Homo sapiens

ccggcctgca cggcacagga gagcaaaactt ctacagacag accaaggcctt ccatttgctg A
 ctgacacatg gaactgaggt gaaattgtgc tccatgattt tacagatttc ataacgttta
 agagacggga ctcagggtcat caaaatgaaa gccctcatct ttgcagctgc tggcctcctg
 cttctgttgc ccactttttg tcagagtggc atggaaaatg atacaaaca cttggcaaaag
 ccaaccttac ccattaagac ctttcgtgga gctccccc aaatttttga agagtcccc
 ttttctgctt tggaaggctg gacaggagcc acgattactg taaaaattaa gtgcccgtgaa
 gaaagtgcct cacatctcca tgtgaaaaat gctaccatgg ggtacctgac cagctcccta
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 gctgtgaccc tgtggtgctt tttcttcagg accagatcca tctgtaccac tgtattctac
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 caggaatatt atctgttca gccagacatc accacctgcc atgatgttca caacacttgc
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 actgatggct tatattttat atatctcata gctttgtgct tgggtagtct taatagtgtc
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 acaaaatagt gaaatgatct tagagaacaa ggacagccat cacagagaac gtctgttttc
 agaacaaca taagcatagt gcaaggagct ccatttccga gctcctaaga aatatgcttc
 aaaggtcaaa cattacaaaa gcattagtag tttgtttgtt tgtttttgag actgagtctc
 actttatcac ccagactggc gtgcagtggc actatcttgg ctcattgcaa cctctgcctc
 ccaggtcagc ctcccaagta gctgggatta caccacctg cccagctact aaaaatactt
 gtatttttag tagagacggg gtttcacctt gttgaccagg ctggtcttga actcctgacc
 tcaagtgatc tccgggctc agcctcccaa agtgcctgat tacaggcgtg agccactgag
 ccagccagca ttagtaattt ttaaaaaac tttatcagta ttttaaaaaat gttaatgcag
 gagaaaagat atcacaaactc tatggaaaat gacatttcca tttgccttat tgcctactca
 agctctttaa atcaccatct tccctatttc

302 4052 Proteinase- Activated Receptor 3 NP_004092.1
 MKALIFAAAG LLLLPTFCQ SGMENDTNL AKPTLPKTF RGAPPNSFEE FPFSALEGWT P Homo sapiens
 GATITVKIKC PEESASHLV KNATMGYLTS SLSTKLIPAI YLLVFVVGVP ANAVTLWMLF
 FRTRSICTTV FYTNLAIADF LFCVTLPFKI AYHNGNNWV FGEVLCRATT VIFYGNMYCS
 ILLACISIN RYLAIVHPFT YRGLPKHTYA LVTCGLWAT VFLYMLPFFI LKQEYLVQP
 DITTCDDVN TCESSSPFQL YYFISLAFEG FLIPFLIY CYAAIIRTIN AYDHRWLWYV

303	4090	G Protein- Coupled Receptor GPR17	NM_005291	KASLLILVIF TICFAPSNI I LIIHHANYYY NNTDGLYFIY LIALCLGSLN SCLDPFLYFL MSKTRNHSTA YLTK	ccgacaccca cggcgagaga tcaactgctg cccgcagac ccctgtccct tctcccga A ccagcagcta aggtatgtcc aaacggagtt ggtggctgg atccagaaa cccccaagag agatgctgaa actctcaggc tctgactcca gccaaagcat gaatggcctt gaagtggctc cccaggctc gatccaac ttctccctgg ccacggcaga gcaatgtggc caggagacgc cactggagaa catgtgttc gctccttct acctcttga tttatcctg gctttagtgtg gcaataacct ggctctgtgg cttttcatcc gagaccacaa gtccggggacc cggcccaacg tgttccctgat gcactggcc gtggccgact tgtcgtgctg gctgggtcctg cccaccgcg tgggtaccca cttctctggg aaccactggc catttggga aatcgcctgc cgtctcacg gcttccctct ctacctcaac atgtacgcca gcactactt cctcacctgc atcagcgccg accgtttcct ggccattgtg caccgggtca agtccctcaa gtcgcgagg cccctctacg cacacctggc ctgtgcttc ctgtgggtgg tgggtgctgt ggccatggcc ccgtgctgg tgagccaca gaccgtgag acaaacaca cggtaggtctg cctgcagctg tacggggaga aggcctccca ccctgctg ctacctgctg atcatccgca gcctgcggca gggcctgcgt gtggagaagc gcctcaagac caaggcagt gcatgatcg ccatagtgtt ggcctcttct ctggtctgct tgtgccccta ccagctaac cgtccgtct acgtgtgca ctaccgacg catggggcct cctgcgccac ccagcgcat ctggccctgg caaacgcct cactcctgc ctaccagcc tcaacggggc actcgacccc atcatgtatt tcttcgtggc tgagaagtgc cgccacgccc tgtgcaactt gctctgtggc aaagggtca agggcccgcc cccagcttc gaaggga ccaacgagag ctgctgagt gccaagtca agctgtgagc ggggggcgcc gtccaggccg agcgagact gtttagact cagcagaccc agtaagaggc atctgcccct tcccagcca cctccccagc agcaacctg aaatctcagc agatgccac cattctcta gatcgccctag tctcaaccca taaaaggaa gaactgaca aggggatcca tggccaccc ctctgcaggg gcttgtgat gctacaatgg ctctagaca ctcaacgact tcatctgtgg caggagaga ggaggccgga agaacaaccc ctgaacaatg gaggccttct tttccccta ggtcccagc ctccttcccg ctacagaatc gctcatcggc gaggtcagc agaaagaccc tgaaggcagg ctgcaaatga ccagaaagag gacctggga gtctgtgtgg ggacggggag ggagtctcaa tactcctttg cagcgcaagg tactctgagt cccctctgta gtgcctctgc cagacacaca ctgcctgagt tgaagagaca caggccacac atttcaggct ggtgcccagc ggacgtcagc actcacggcc tgcggggact cagcacagct ctggattctg gatctcctt cctgtaaccc cagcacaaag cctgcaaccc ccagagctct ttgacaggct cccaggccctc ccagtcctgg acaagcatgt gcagtcacgg gagctcagct caggccaggc ctgggctgtg cactgcctc ccactgaccc agaccactt cctccagaga ggcctctctc cgcctgagct attcccttg ctagtgtgca gatatttccc taacatgtcc tttttgtat ttgtttgtac ggaccataa tataactgta gctttaagac taataaaaa	Homo sapiens
304	4090	G Protein- Coupled Receptor GPR17	NP_005282.1	GLEVAPPGLI TNFSLATAEQ CGQETPLENM P LFAFYLLDF ILALVGNLTA LWFIRDHKS GTPANVFLMH LAVADLSCVL VLPTRLVYHF SGNHWPFGEI ACRLTGFLFY LNMVASYIFL TCISADRFIA IVHPVKSLKL RRPLYAHLAC AFLWVWVAVA MAPLLVSPQT VQTNHTWVCL QLYREKASHH ALVSLAVAFI PPFITTVTCY		Homo sapiens

305 4254 Rhodopsin NM_000539

LLIIRSLRQG LRVEKRLKTK AVRMIIVLA IFLVCFVPYH VNRSVVVLHY RSHGASCATQ
RILALANRIT SCLTSLNGAL DPIMYFFVAE KFRHALCNLL CGKRLKGPFP SFEGKTNES
ISAKSEL
agagtcattcc agctggagcc ctgagtggtgct gagctcaggc cttccagcga ttcttggtg A
ggagcagccca cgggtcagcc acaaggccca cagccatgaa tggccagaaa ggcctaaact
tctacgtgcc ctctccaat gcgacgggtg tggtagcgag cccctcgag taccacagt
actacctggc tgagccatgg cagttctcca tgcctcagc cgtccagcac aagaagctgc
tgctgggtt ccccatcaac ttctcagc tctacgtcac cgtccagcac aagaagctgc
gcagcctct caactacat ctgctcaacc tagccgtggc tgacctcttc atggtccctag
gtggcttcac cagcaccctc tacacctctc tgcatggata cttcgtcttc gggccacag
gatgcaattt ggagggttc ttggccacc ttggcggtga aattgcctg tggctcctgg
tggtcctggc catcgagcg tgcgtgggtg tctgtaagcc catgagcaac ttccgcttcg
gggagaacca tgcctcatg ggcgttgctc tccctgggtt cctggcgctg gctgcgccc
caccctcact cgcggctgg tccaggtaca tcccgagggt cctgcagtcg tcgtgtggaa
tcgactacta cagctcaag cggaggtca acaacgagtc tttgtcctc tacatgttcg
tggtccactt caccatccc atgattatca tcttttctg ctatgggcag ctcgtcttca
ccgtcaagga ggccgctgc cagcagcagg agtcagccc caccagaa gcaagaaagg
aggtcaacct catggtcat atcatggtca tgccttctc gatctgttg gtgcccctacg
ccagcgtggc attctacat tccaccacc aggtctcaa cttcggtccc atcttcata
ccatcccagc gttctttgcc aagagcgccg ccatctaca cctgtcctc tatatcatga
tgaacaagca gttccggaa tgcattgctc caccatctg ctgcggcagg aacctactgg
gtgacgatga ggcctctgt accgtgtcca agacggagac gagccagtg gcccggcct
aagacctgcc taggactctg tggcgacta taggcgtctc ccatcccta cacttcccc
cagccacagc caccaccaca ggagcagcg ctgtgcagaa tgaacgaagt cacataggct
ccttaatttt ttttttttt ttaagaaata attaatgagg ctcctcact acctgggaca
gectgagaag ggacatccc caagacctac tgatctggag tcccacttc ccaaggcca
gcgggatgtg tgccctcct cctccact catcttcag gaacagagg attcttgctt
tctggaaaaa gttccagct tagggataag tgtctagcac agaaggggg acacagtagg
tgcttaataa atgctggatg gatgcaggaa ggaatggagg aatgaatgg aaggagaaac
atatctatcc tctcagacc tgcagacc ggcctcact tcttctcta taaaatggaa atcccagatc
cagttgtttt tccctccctg ccgacagca gctactgaga agctcaaaa aggtgtgtgt gtgtctatgt
cctggtcctg ccactttgta aatagcaaga agctgtacag atctagtta atgttgtgaa
tggtgtttca gcaattgta agttaattac tatgattatc acctcctgat agtgaacatt
taacatcaat taatgtaact gatgggttt caccacaact tggggcagg ttttaaaat
ttgagattgg gatttcagat gatgggttt caccacaact tggggcagg ttttaaaat
tagctaggca tcaaggccag accaggctg ggggttggtg ttaggcagg gacagtca
ggaatgcagg atgcagtcac cagacctgaa aaaaacac tgggggagg gacaggtgaa
ggcaagtcc ccaatgagg tgagattggg cctgggtct caccctagt gtggggcccc
aggtccctg cctcccttc ccaatgtgg ctatggagag acaggcctt ctctcagcct
ctggaagcca cctgctctt tgctctagca cctgggtccc agcatctaga gcatggagcc
tctagaagcc atgctcacc gccacattt aattaacagc tgagtcctc atgtcatcct

Homo
sapiens

306	4254	Rhodopsin	NP_000530.1	<p>tactcgaaga gcttagaaac aaagagtggg aaattccact gggcctacct tccttgggga</p> <p>tggtcatggg cccagtttc cagtttccct tgccagagaa gcccattctc agcagttgct</p> <p>agtcattctt ccattctgga gaactgtctc caaaaagact gccacatctc tgaggtgtca</p> <p>gaattaagct gcctcagtaa ctgtctcccc ttctccatat aagcaaaagc agaagctcta</p> <p>gcttaacca gctctgcctg gagactaagg caaattgggc cattaaaagc tcagctccta</p> <p>tggttgattt aacggtgggt ggttttgggt ctttcacact ctatccacag gatagattga</p> <p>aactgccagc ttccacctga tccctgacct tgggatgggt ggattgagca atgagcagag</p> <p>ccaagcagca cagagtcccc tggggctaga ggtggaggag gcagtcctgg gaatgggaaa</p> <p>aacccca</p>	Homo sapiens
307	4284	Retinal G Protein-Coupled Receptor RPE	NM_002921	<p>agagacagct gggccactgg cagtgggga gagtgggat ggcagagacc agtgcctgc A</p> <p>ccactggctt cggggagctc gaggtgctgg ctgtggggat ggtgtactgt gtggaagctc</p> <p>tctccggtct cagcctcaat acctgacca tcttctcttt ctgcaagacc ccggagctgc</p> <p>ggactccctg ccactactg gtgtgagct tggctcttgc ggacagtggg atcagcctga</p> <p>atgccctcgt tgcagccaca tccagccttc tccggcgctg gccctacggc tcggacggct</p> <p>gccaggctca cggcttccag ggtttgtga cagcgttggc cagcatctgc agcagtgcag</p> <p>ccatgcctat gggcgcttat caccactact gcacccgtag ccagtgggct tggaactcag</p> <p>ccgtctctct ggtgtctctc gtgtggctgt ctcttgcctt ctgggcagct ctgccccctc</p> <p>tgggttgggg tccactatgac tatgagccac tggggacatg ctgccccctg gactactcca</p> <p>agggggacag aaacttcacc agcttctctt tcaccatgtc ctcttcaac ttcgccatgc</p> <p>ccctcttcat cagatcact tccatagtc tcatggagca gaaactgggg aagagtggcc</p> <p>atctccaggt aaacacact ctgccagcaa ggacgtgctg gctcggctgg ggcctctatg</p> <p>ccatcctgta tctatacgca gtcatcgag acgtgacttc catctcccc aaactgcaga</p> <p>tgggtccccg cctcattgac aaaaatggtg ccacgatcaa tgccatcaac tatgccctgg</p> <p>gcaatgagat ggtctcagg ggaatctggc agtgcctctc accgcagaag agggagaagg</p> <p>accgaacca gtgagctgc caccctggag tgagccccag gccagaggc tgttccagga</p> <p>gtcctgcccc cagcctcgg tggccaaagc cagacactca ccaccttc ccagtggccc</p> <p>cgtggatcct ggtcctaggc tggacacagg attcagaaa acaccaggct gcacagaaa</p> <p>agccagatgg acctgagtgt cggtcacag cccctacact caagctgag aggcctcagg</p> <p>aaagtcattc ctttttaaaa ataaataaa atgtaagggt gtacagtga gttttgttac</p> <p>atggatagat tgcctagtgg tgaagtctgg gcttttagtg taaccatcac cctaataata</p> <p>tacgtttgtac ccattaagt atttctcacc cctcaccccc tccaccttg tcaccttct</p> <p>gagtcctcaa tgtctattat tccacactcc atgtccacgt gtacacatta tttagctccc</p> <p>acttacaagt gagaacatgt ggtatttgac ttcca</p>	Homo sapiens
308	4284	Retinal G Protein-	NP_002912.1	<p>MAETSAALPTG FGELEVLAVG MVLLVEALSG LSLNLTIFG FCKTPELRTP CHLLVLSLAL P</p> <p>ADSGISLNAL VAATSSLLRR WPYGSDGCOA HGFGQGFVTAL ASICSSAAIA WGRYHHYCTR</p>	Homo sapiens

309	4321	Coupled Receptor RPE	Secretin Receptor	NM_002980	SQLAWNSAVS	LVLFWLSSA	FWAALPLLGW	GHYDYEPLGT	CCTLDYSKGD	RNFTSFLFTM	Homo sapiens
					SFFNFAMPLF	ITITSYSIME	QKLGKSGHLQ	VNTTLPARTL	LLGWGPYAIL	YLYAVIADVT	
310	4321	Secretin Receptor	Secretin Receptor	NP_002971.1	SISPKLQWVP	ALLAKMWPTI	NAINYALGNE	MVCRGIWQCL	SPQKREKDR	K	Homo sapiens
					acgagggcgg	cgggagccc	ggaccctgcg	cggggcgctg	agctcccgag	cgggcagagg	
					gcacgggcag	gcggagctcg	gggcgccctc	ggggaacgtg	cgggcacat	cgtccccac	
					ctgtgcgcg	cgctgcagca	gctactactg	cgggtgctgc	tgcctgcgc	cgcgcactcg	
					actggagccc	ttccccgact	atgtgacgtg	ctacaagtgc	tgtggagaag	gcaagaccag	
					tgccctgcagg	aactctccag	agagcagaca	ggagacctgg	gcacggagca	gccagtgcca	
					ggttgtgagg	ggtgtggga	caacataagc	tgctggccct	cttctgtgcc	gggcccggatg	
					gtggaggtgg	aatgcccag	attcctccgg	atgctacca	gcagaaatgg	ttccttgttc	
					cgaactgca	cacaggatgg	ctggtcagaa	acctcccca	ggcctaactc	ggcctgtggc	
					gtaaatgtga	acgactcttc	caacgagaag	cggcactcct	acctgtctgaa	gctgaaagt	
					atgtacacg	tgggctacag	ctcctccctg	gtcatgctcc	tggtcgccct	tggcatcctc	
					tgtgctttcc	ggaggctcca	ctgcactgc	aactacatcc	acatgcacct	gttcgtgtcc	
					ttcatccttc	gtgcccgtgc	caactctc	aaggacgcg	tgctcttctc	ctcagatgat	
					gtcacctact	gcgattccga	cagggcgggc	tgcaagctgg	tcatggtgct	gttcaggtac	
					tgcattcatg	ccaactactc	ctggctgctg	gtggaaggcc	tctaccttca	cacactcctc	
					gccatctcct	tcttctctga	aagaaagtac	ctccaggat	ttgtggcatt	cggatgggg	
					tctccagcca	tttttggctg	tttgtgggt	attgccagac	actttctgga	agatgttggg	
					tgctgggaca	tcaatgccaa	cgcattccatc	tggtggatca	ttcgtgtgtcc	tgtgatcctc	
					tccatctcta	ttaatttcat	ccttttata	aacattctaa	gaatcctgat	gagaaaaact	
					agaacccaag	aaacaagagg	aatgaagtc	agccattata	agcgcctggc	caggtccact	
					ctcctgctga	tccccctctt	tggcatccac	tacatgctct	tgccttctc	cccagaggac	
					gctatggaga	tccagctgtt	ttttgaacta	gccctgggt	cattccaggg	actgggtggg	
					gccgtcctct	actgcttct	caatggggag	gtgcagctgg	aggttcagaa	gaagtggcag	
					caatggcacc	tccgtgagtt	cccactgcac	cccgtggcct	ccttcagcaa	cagcaccacg	
					gccagccact	tggagcagag	ccagggcacc	tgcaggacca	gcatcatctg	agaggctgga	
					gcagggtcac	ccacggacag	agaccaagag	aggtcctgcg	aaggctgggc	actgctgtgg	
					gacagccagt	cttccacga	gacacctgt	gtcctccttc	agctgaagat	gccccctccc	
					aggccttga	ctctccgaa	gggatgtgag	gcactgtgg	gcaggacaag	ggcctgggat	
					ttggttcggt	tgctcttctg	ggaagagaag	ttcaggggtc	ccagaaagg	acagggaaa	
					aaatgggtgc	tgggatgaga	ttc				
					MRPHLSPPIQ	QLLLPVLLAC	AAHSTGALPR	LCDVLQVLWE	EQDQCLQELS	REQTGDLGTE	P
					QVPGCEGMW	DNISCPSSV	PGRMVEVECP	RFLRMLTSRN	GSLFRNCTQD	GWSETFPRPN	
					LACGVNVNDS	SNEKRHSYLL	KLVMTYVGY	SSSLMMLLVA	LGILCAFRRL	HCTRNYIHMH	
					LFVSFILRAL	SNFIKDAVLF	SSDDVTYCDP	HRAGCKLMV	LFQYCIIMANY	SWLLVEGLYL	
					HTLLAISFFS	ERKYLOGFVA	FGWGSPIFV	ALWAIARHFL	EDVGCWDINA	NASIWWIIRG	
					PVILSILINF	ILFINILRIL	MRKLRTQETR	GNEVSHYKRL	ARSTILLIPL	FGIHYIVFAF	
					SPEDAMEIQL	FFEALGSFQ	GLWAVLYCF	LNGEVQLEVQ	KKWQWHLRE	FPLHPVASFS	
					NSTKASHLEQ	SQGTCTRTSII					

311	4480	Somatostatin NM_001049 Receptor Type 1	atgttcccca atggcaccgc ctctctctct tctctctctc ctatgccccag cccgggcagc A tgccgcgaag gcggcgccag caggggcccc gggcgccggg ctgcccagcg catggaggag ccaggcgaa atgctgcccc gaacgggacc ttgagcgagg gccaggcgag cggcatcctg atctctttca tctactccgt ggtgtgcctg ttggggcctg ttgggaactc tatggtcatc tacgtgacc tgcgctatgc caagatgaag acggccacca acatctacat cctaaatctg gccattgctg atgagctgct catgctcagc gtgcccctcc tagtcaacct cactgtgttg cgccactggc ccttcggtgc gctgctctgc cgctcctgac tcagcggtga cgcggtcaac atgttcacca gcatctactg tctgactgtg ctacagctgg accgtacgt ggcgctggg catcccatca aggcggcccg ctaccgccc cccaccgtgg ccaagtagt aaacctgggc gtgtgggtgc tatcgtgct cgtcatcctg cccatcgtgg tcttctctc caccgggc aacagcgac gcacgggtggc ttgcaacatg ctcatgcccag agcccgtca acgctggctg gtgggcttcg tgtgtgacac atttctcatg ggttctctgc tgcccgtggg ggtatctgc ctgtgctacg tgctcatcat tgctaagatg cgcattggtg cctcaaggc cgcctggcag cagcgcaagc gctcggagcg caagatcac tgatggtggt tgatggtgtt gatggtgtt gtcatctgct gcatgcctt ctacgtggtg cagctggtta acgtgttgc tgagcaggac gagccacgg tgagtcagct gtcggtcctc ctggtgctatg ccaacagctg cgccacccc atctctatg gcttctctc agacaactc aagcgtctt tccaaacgcat cctatgcctc agctggatgg acaacggcg ggaggagcg gttgactatt acgccaacgc gctcaagagc cgtgcctaca gtgtggaaga cttccaaact gagaacctg agtccggcg cgtcttccgt aatggcacct gcacgtccc gatacagac cctga MFPNGTASSP SSSPSPSGS CGEGGSRGP TAGAADIYLNL LSEGGQSAIL P ISFIYSVVCL VGLCGNSMVI YVILRYAKMK TATNIYILNL VPFLVTSTLL RHWPFGLLC RLVLSDAVN MFTSIYCLTV LSVDRYVAVV HPIKAARYRR PTVAKVNLG VWVLSLVIL PIVFSTRTA NSDGTACNM LMPEPAQRWL VGFVLYTFM GFLLPVGAIC LCYVLIIAKM RMVALKAGWQ QRKRSEKIT LMVMMVMVF VICWMPFYV QLVNVFAEQD DATVSQLSVI LYGANSCANP ILYGFLSDNF KRSFQRI L SWMDNAAEEP VDYYATALKS RAYSVDFQP ENLESGGVFR NGTCTSRITT L	Homo sapiens
312	4480	Somatostatin NP_001040.1 Receptor Type 1	atggacatgg cggatgagcc actcaatgga agccacacat ggctatccat tccatttgac A ctcaatggct ctgtggtgtc aaccaacacc tcaaaccaga cagagccgta ctatgacctg acaagcaatg cagtcctcac attcatctat ttgtgtggtc gcatcattgg gttgtgtggc aacacacttg tcatctatgt catcctccgc tatgccaaga tgaagacct caccaacatt tacatcctca acctggccat cgcagatgag ctcttcacgc ttgggtctgccc ttcttggct atgcaggtgg ctctgggtcca ctggcccttt ggcaaggcca ttgcccgggt ggtcatgact gtggatggca tcaatcagtt caccagcatc ttctgcctga cagtcatgag catcgaccga tacctggctg tggccaccc catcaagtgc gccaaagtga ggagacccc gacggccaag atgatacca tggctgtgtg gggagtctct ctgctggtga tcttgcccc catgatatat gctgggctcc ggaagcaacca gtgggggaga agcagctgca ccatcaactg gccaggtgaa tctggggctt ggtacacagg gttcatcctc tacacttca ttctgggggt cctggtaacc ctcaccatca tctgtctttg ctacctgttc attatcatca aggtgaagtc ctctggaatc cgagtgggct cctctaagag gaagaagtct gagaagaagg tcacccgaat ggtgtccatc gtgggtggctg tcttcatctt ctgctggctt ccttcttaca tattcaactg ttcttccgtc	Homo sapiens
313	4481	Somatostatin NM_001050 Receptor Type 2		Homo sapiens

314	4481	Somatostatin NP_001041.1 Receptor Type 2	tccatggcca tcagcccccac ccagccctt aaaggcatgt ttgactttgt ggtggtcctc acctatgcta acagctgtgc caaccctatc ctatatgcct tcttgtctga caacttcaag aagagcttcc agaattgctc ctgcttggtc aagtgtagcg gcacagatga tggggagcgg agtacagta agcagacaa atcccggtg aatgagacca cggagacca gaggaccctc ctcaatggag acctccaaac cagtattcta MDMADEPLNG SHTWLSIPFD LINGSVSTNT SNQTEPYDL TSNVLTIFY FVCIIGLCG P NTLVIYVILR YAKMTITNI YILNLAIAD ELMGLPFLA MQVALVHPF GKAIQVVMVT VDGINQFTSI FCLTVMSIDR YLAVVHPKS AKWRRPRTAK MITMAVWGS LLVILPIMIY AGLRNQWGR SSCINWPGE SGAWYTGFI YTFILGELVP LTIICLCYLF IIIKVKSSGI RVGSSKRKKS EKKVTRMVS I VAVVIFCWL PFYIFNVSSV SMAISPTPAL KGMFDFVVVL TYANSCANPI LYAFLSDNEK KSFQNVLCV KVSQDDGER SDSKQDKSRL NETTETQRTL LNGDLQTSI	Homo sapiens
315	4482	Somatostatin NM_001051 Receptor Type 3	atggacatgc ttcatccatc atcgggtgctc acgacctcag aacctgagaa tgcctcctcg A gcctggcccc cagatgccac cctgggcaac gtgtcggcgg gcccaagccc ggcaggcgtg gccgtcagtg gegttctgat ccccttggtc tacctgggtg tgtcgtggt ggcctcgtg ggtaactcgc tggatcatc tgtggtcctg cggcacacgg ccagcccttc agtcaccaac gtctacatcc tcaacctggc gctggccgac gagctcttca tgcctgggct gccctcctg gccgcccaga acgcccgtgc ctactggccc ttccgtctcc tcatgtgcc cctggtcatg gcggtggatg gcatcaacca gtccaccagc atattctgcc tgcctgtcat gacgtggac cgtaacctgg ccgtggtaca tcccaccgc tcggcccgtc ggcgacacgc tccggtggcc cgacaggta cgcggcgtgt gtgggtggcc tcagccgtgg tgggtcgtcc cgtggtggtc ttctcgggag tgcctcctgc catgagcacc tgcacatgc agtgccccga gccggcggcg gcctggcgag ccggcttcat catctacacg gccgacctgg gcttctcgg gccgtgctg gtcatctgcc tctgctacct gctcatcgtg gtgaaggctg gctcagctgg gcgcccgtg tgggacacct cgtgccagcg gcgcccgcgc tcgaaacgca ggttcacgcg catggtggtg gccgtggtgg cgtctctcgt gctctgctgg atgcccctct acgtgctcaa catcgtcaac gtggtgtgcc cactgcccga ggagcctgcc ttcttgggc tctacttct ggtggtggcg ctgcccctatg ccaacagctg tgccaaaccc atcctttatg gcttctctc ctaccgctc aagcagggtt tccgagggtt cctgctgctg cctcccgcg gtgtgcgcag ccaggagccc actgtggggc ccccggagaa gactgaggag gaggatgagg aggaggagga tggggaggag agcaggaggg ggggcaaggg gaaggagatg aacggccggg tcagccagat cagcagcct ggcaccagcg ggcaggagcg gccgcccagc agagtggcca gcaaggagca cagctccta ccccaagagg cttccactgg ggagaagtcc agcacatgc gcatcagta cctgtag MDMLHPSSVS TTSEPENASS AWPPDATLGN VSAGPSPAGL AVSGVLIPLV YLVVCVVGLL P GNSLVIYVVL RHTASPSVTN VYILNLALAD ELFMGLPFL AQNALSYWP FGSIMCRILVM AVDGINQFTS IFCLTVMSVD RYLAVVHPTR SARWRTAPVA RTVSAVWVA SAVVLPVWV FSGVPRGMST CHMQWPEPAA AWRAGFIIT AALGFFGPLL VICLCYLLIV VKVRSAGRRV WAPSCQRRRR SERRVTRMV AVVALFVLW MPFYVLNIV WCPLPEEPA FFGLYFLVVA LPYANSCANP ILYGFLSYRF KQGFRRVLLR PSRRVRSQEP TVGPPEKTEE EDEEEDGEE SREGGKGKEM NGRVSQITQP GTSGQERPPS RVASKEQQLL PQEASTGEKS STMIRISYL	Homo sapiens
316	4482	Somatostatin NP_001042.1 Receptor Type 3		Homo sapiens

317	4483	Somatostatin Receptor Type 4	NM_001052	<p>atgagcgccc cctcgacgct gccccccggg ggcgaggaag ggcctggggac ggcctggccc A</p> <p>tctgcagcca atgccagtag cgctccggcg gaggcggagg aggcgggtggc gggcccgggg</p> <p>gacgcgggg cgcggggcat ggtcgctatc cagtgcattc acgcgctggt gtgcctggtg</p> <p>gggctggtg gtaacgccct ggtcatcttc gtgacatctc gctacgcca gatgaagacg</p> <p>gctaccacca tctacctgct caacctggcg gtacggcagc agctcttcat gctgagcgtg</p> <p>cccttcgtgg cctcgtcggc cgccctggcg cactggccct tcggctccgt gctgtgccg</p> <p>gcggtgctca gcgtcgacgg cctcaacatg ttaccacggc tcttctgtct caccgtgctc</p> <p>agcgtggacc gctacgtggc cgtggtgac cctctggcg cgcgaccta cggcgggccc</p> <p>agcgtggcca agctcatcaa cctggggcgtg tggctggcat cctgttggc cactctccc</p> <p>atcgccatct tcgcagacac cagaccggct cgcgggcgcc aggcgctggc ctgcaacctg</p> <p>cagtggccac accggcctg gtcggcagtc ttcgtggtct acacttctc gctgggttc</p> <p>ctgctgccc gctggtggccat tggcctgtgc taccgtgctc tctgtggcaa gatgcgcgc</p> <p>gtggccctgc gcgtggctg gcagcagcg agcgctcg agaaagaaat caccaggtg</p> <p>gtgctgatgg tcgtggctgt ctttgtgtc ttttgtatg ctttctacgt ggtgcagctg</p> <p>ctgaacctcg tcgtgaccag ccttgatgcc accgtcaacc acgtgtccct tatectcagc</p> <p>tatgccaaca gctggccaa cctattctc tatggtctc tctccgacaa ctcccgcca</p> <p>tccttcagc ggttctctg cctgcgtgc tgcctcctg aggtgctgg aggtgctgag</p> <p>gaggagccc tggactacta tggcactgct ctaagagaca aggtggggc aggtgctgag</p> <p>tgccccccac taaaatgcca gcaggaagcc ctgcaaccag aaccggcgcc caagcgcac</p> <p>ccccccacca ggaccaccac cttctga</p>	Homo sapiens
318	4483	Somatostatin Receptor Type 4	NP_001043.1	<p>MSAPSTLPPG GEELGTAMP SAANASSAPA EAEAVAGPG DARAAGMVAI QCIYALVCLV P</p> <p>GLVGNALVIF VILRYAKMKT ATTIIYLLNLA VADELFMISV PFVASSAALR HWPFGSVLCR</p> <p>AVLSVDGLNM FTSVFCLTVL SVDRYVAVVH PLRAATYRRP SVAKLINLGV YLLASLLVTLR</p> <p>IAIFADTRPA RGGQAVACNL QWPHPAWSAV FVYTFLLGF LLPVLAIGLC YLLIVGKMR</p> <p>VALRAGWQQR RRSEKKITRL VLMVVVFFVL CWMFFYVQL LNLVVTSLDA TVNHVSLILS</p> <p>YANSCANPIL YGFLSDNFRF SFQVLCRLC CLLEGAGGAE EEPLDYATA LKSKGGAGCM</p> <p>CPPLKCCQEA LQPEPGRKRI PIRTRTF</p>	Homo sapiens
319	4484	Somatostatin Receptor Type 5	NM_001053	<p>atggagcccc tgttcccagc ctcacgccc agctggaacg cctcctccc gggggctgccc A</p> <p>tctggaggcg gtgacaacag gacgctggtg gggccggcg cctcggcagg ggcggggcg</p> <p>gtgctggtgc cgtgctgta cctgctggtg tgtgctggcg ggtggggcg gaacacgctg</p> <p>gtcatctacg tggctgctgc cttcgccaag atgaagaccg tcaccaacat ctacattctc</p> <p>aacctggcag tggccgacgt cctgtacatg ctggggctgc ctttctctggc cagcgagaac</p> <p>gcgctgctt tctggccctt cgccccctc cgtgcccgc tggctcatgac gctggacggc</p> <p>gtcaaccagt tcaccagtgt cttctgctg acagtcatga cgtgggaccg ctacctggca</p> <p>gtggtgacc cgtgagctc ggcctgctgg gcgcggcggt tctgtggtt cgtggcgagc</p> <p>gcgcgccct ggttctgtc tctgtgcatg tcgtgccc cctgtggtt cgtggcgtg</p> <p>caggagggcg gtacctgcaa cgccagctgg ccgagcccc tggggctgtg gggcgccgtc</p> <p>ttcatcatct acacggccgt gctgggcttc ttcgcggcg tgcgtgtcat ctgctgtgc</p> <p>tactgtctca tcgtggtgaa ggtgagggcg gcggcgctgc gctgggctg cgtgcggcg</p> <p>cgctcgagc ggaagtgac gcgctggtg ttggtggtg tgcgtgtgt tgcgggatgt</p> <p>tggctgccct tcttaccgt caacatcgtc aacctggcg tggcgtgccc ccaggagccc</p>	Homo sapiens

320	4484	Somatostatin Receptor Type 5	NP_001044.1	MEPLFPASTP SWNASSPGAA SGGDNRTL V GPAPSAGARA VLVPLVYLIV CAAGLGNTL P VIYVLRFAK MKTFTNIYIL NLAVADVLYM LGLPFLATQN AASFWPFGPV LCRLVMTLDG VNQTSVFCL TVMSVDRYLA VVHPLSSARW RRPVRVAKLAS AAAWVLSLCM SLPLLVEADV QEGGTCNASW PEPVGLWGAV FIIYTAVLGF FAPLLVLC FAPLLVLC YLLIVVKVRA AGVRVGCVR RSEKRVTRMV LVVVLVFAGC WLPEFTVNI V NLAVALPOEP ASAGLYFFV ILSYANSCAN PVLVGFSLDN FRQSFQKVL LKRGSGAKDA DATEPRPDRI RQQEATPPA HRAAANGLMQ TSKL	241/448	Homo sapiens
321	4552	Tachykinin Receptor 1	NM_001058	aattcagagc caccgcgggc agggcggcag tgcattccaga agcgtttata ttctgagcgc A cagttcagct ttcaaaaaga gtgctgcccc taaaagcct tccacctcc tgtctgcttt agaaggacc ttgagccccg gcgccagcca caggactctg ctgcagaggg ggttctgtga cagatagtag gctttacgcc tagcttcgaa atggataacg tctctccggt ggactcagac ctctcccaaa acatctccac taacacctg gaacccaatc agttcgtgca accagcctgg caaatgttcc ttggggcagc tgcctacacg gtcatgttgg tgacctctgt ggtgggcaac gtggtagtga tgtggatcat cttagccccc aaagaatga ggacagtgac gaactatatt ctggtgaacc tggccttcgc ggaggcctcc atggctgcat tcaatacagt ggtgaacttc acctatgctg tccacaacga atggtactac ggctgttct actgcaagtt ccacaacttc tttcccatcg ccgtgtctt cggcagatc tactccatga cggctgtggc ctttgatagg tacatggcca tcatacatcc cctccagccc cggctgtcag ccacagccc caaagtggtc atctgtgtca tctgggtcct ggctctcctg ctggccttcc cccagggcta ctactcaacc acagagacca tggccagcag agtcgtgtgc atgtgtgaa ttccgaacaag atttatgaga aagtgtacca catctgtgtg actgtgtga tctacttctt cccctgtctg gtgattggct atgcatacac cgtagtggga atcacactat gggccagtgat gatccccggg gactcctctg accgctacca cgagcaagtc tctgccaagc gcaagggtgt caaaatgatg attgtcgtgg tgtgcacctt cgcctatctg tggctgccc tccacatctt cttcctcctg ccctacatca accagatct ctacctgaag aagtttatcc agcaggtcta cctggccatc atgtggctgg ccatgagctc caccatgtac aaccccatca tctactgctg cctcaatgac aggttccgtc tgggcttcaa gcatgccttc cgggtgtgccc ccttcatcag cgccggcgac tatgaggggc tggaaatgaa atccaccgg tatctccaga cccagggcag tgtgtacaaa gtcagccgcc tggagaccac catctccaca gtggtggggg cccacagga ggagccagag gacggcccca aggccacacc ctctgctcctg gacctgacct ccaactgctc ttcacgaaagt gactccaaaga ccatgacaga gagcttcagc ttctctcca atgtgtctc ctaggccaca gggctcttgg caggtgcagc cccactgccc tttagacctg cctccttcat gcatggaaaat tcccttcac tggaaaccatc agaaacaccc tcacactggg acttgcaaaa aggttcagta tgggttaggg aaaaattcc atccttgagt caaaaaatc caattctcc ctatctttgc caccctcatg ctgtgtgact caaaccaaat cactgaactt tgctgagcct gtaaaaataa aggctcgacc agctttctt caagagccca atgcattcca ttcttggag tgactttggc	241/448	Homo sapiens

322	4552	Tachykinin Receptor 1	NP_001049.1	tgcatgcgag tgctcatttc aggatg	MDNVLVDS LSPNISTNTS EPNQFVQPAW QIVLWAAAYT VIVVTSVGN VVVMWIIAH P	Homo sapiens
				KRMRTVTNYF LVNLFAEAS MAAFTNVNF TYAVHNEWYY GLFYCKFHNH FPIAAVFASI		
				YSMTAVAFDR YMAIIHPLQ RLSATATKV ICVIVLALL LAFPQGYST TETMPSRVVC		
				MIWPEHPNK IYKVVYHICV TVLIYFLPLL VIGYAYTVG ITLWASEIPG DSSDRYHEQV		
				SAKRKVVKM IVVCTFAIC WLPFHIFLL PYINPDLYK KFIQVYLAI MWLMSSTMY		
				NPIIYCLND RRLGFKHAF RCCPFISAGD YEGLEMKSTR YLQTQGSVYK VSRLETTIST		
				VVGAHEEPE DGPKATPSSL DLTNSCSSRS DSKTMTSEFS FSSNVLS		
323	4687	Thrombin Receptor	NM_001992	ggcggggggc gcacagagcc agaggggctt gcgagggcg gctgagggac cgcgggggag A	ggcggggggc gcacagagcc agaggggctt gcgagggcg gctgagggac cgcgggggag A	Homo sapiens
				ggcgcccgag cggctccagc gcagagactc tccctgactt caccctggcg ctaaccgccc cagacacagc	ggcgcccgag cggctccagc gcagagactc tccctgactt caccctggcg ctaaccgccc cagacacagc	
				cgcggccgag ggtcgcttg accctgatct ccccgctgg caccctggcg caccctggcg tctgcctgcc	cgcggccgag ggtcgcttg accctgatct ccccgctgg caccctggcg caccctggcg tctgcctgcc	
				gcgaagaccg gctccccgag ccgcagaaat ccccgctgg caccctggcg ggtgaagcgg agcagcccg	gcgaagaccg gctccccgag ccgcagaaat ccccgctgg caccctggcg ggtgaagcgg agcagcccg	
				ggcggggcag cctccccgag cagcgcccg cagagcccg gacaatgggg ccgcggcgcc	ggcggggcag cctccccgag cagcgcccg cagagcccg gacaatgggg ccgcggcgcc	
				tgctgctggt ggccgctgc ttcagctctg cggcccgctt gttgctgccc cgcaccccg	tgctgctggt ggccgctgc ttcagctctg cggcccgctt gttgctgccc cgcaccccg	
				cccgcaggcc agaatacaaa gcaacaaatg ccaccttaga tccccggtca tttcttctca	cccgcaggcc agaatacaaa gcaacaaatg ccaccttaga tccccggtca tttcttctca	
				ggaaccccaa tgataaatat gaaccatttt gggaggatga ggaagaaat gaaagtgggt	ggaaccccaa tgataaatat gaaccatttt gggaggatga ggaagaaat gaaagtgggt	
				taactgaata cagattagtc tccatcaata aaagcagtc tctcaaaaa caacttcctg	taactgaata cagattagtc tccatcaata aaagcagtc tctcaaaaa caacttcctg	
				cattcatctc agaagatgcc tccggatatt tgaccagctc ctggctgaca ctctttgtcc	cattcatctc agaagatgcc tccggatatt tgaccagctc ctggctgaca ctctttgtcc	
				catctgtga caccggagt tttgtagtca gcctccact aaacatcatg gccatcgttg	catctgtga caccggagt tttgtagtca gcctccact aaacatcatg gccatcgttg	
				tggtcatcct gaaatgaag gtcaagaagc cggcggtggt gtacatgctg cacctggcca	tggtcatcct gaaatgaag gtcaagaagc cggcggtggt gtacatgctg cacctggcca	
				cggcagatgt gctgtttgtg tctgtgctcc cctttaaagat cagctattac tttccggca	cggcagatgt gctgtttgtg tctgtgctcc cctttaaagat cagctattac tttccggca	
				gtgattggca gtttggtgtc gaattgtgtc gcttcgtcac tgcagcattt tactgtaaca	gtgattggca gtttggtgtc gaattgtgtc gcttcgtcac tgcagcattt tactgtaaca	
				tgtagcctc tatctgtctc atgacagtca taagcattga ccggttctct gctgtggtgt	tgtagcctc tatctgtctc atgacagtca taagcattga ccggttctct gctgtggtgt	
				atcccatgca gtccctctcc tggcgactc tgggaaggcg ttccttcaat tgtctggcca	atcccatgca gtccctctcc tggcgactc tgggaaggcg ttccttcaat tgtctggcca	
				tctgggcttt ggccatcgca ggggtagtgc ctctcgtcct caaggagcaa accatccagg	tctgggcttt ggccatcgca ggggtagtgc ctctcgtcct caaggagcaa accatccagg	
				tgcccggtct caacatcact acctgtcatg atgtgctcaa tgaaccctg ctggaaggct	tgcccggtct caacatcact acctgtcatg atgtgctcaa tgaaccctg ctggaaggct	
				actatgccta ctacttctca gcttctctg ctgtcttctt tttgtgccc ctgactcattt	actatgccta ctacttctca gcttctctg ctgtcttctt tttgtgccc ctgactcattt	
				ccacggtctg ttatgtgtct atcattcgat gtcttagctc ttcgcagtt gccaaaccga	ccacggtctg ttatgtgtct atcattcgat gtcttagctc ttcgcagtt gccaaaccga	
				gcaagaagtc ccgggctttg ttcctgtcag ctgctgtttt ctgcatcttc atcatctgt	gcaagaagtc ccgggctttg ttcctgtcag ctgctgtttt ctgcatcttc atcatctgt	
				tccgacccac aaacgtctc ctgattgccc atactcatt ccttctcac acttccacca	tccgacccac aaacgtctc ctgattgccc atactcatt ccttctcac acttccacca	
				cagaggctgc ctactttgct taccctctct gtgtctgtgt cagagcata agctcgtgca	cagaggctgc ctactttgct taccctctct gtgtctgtgt cagagcata agctcgtgca	
				tcgacccctt aatttactat tacgttctct gttataagca gagtactgtc tacagtatct	tcgacccctt aatttactat tacgttctct gttataagca gagtactgtc tacagtatct	
				tatgtgcaa agaaagtcc gatccagca gttataagca gattgggagc ttgatggcaa	tatgtgcaa agaaagtcc gatccagca gttataagca gattgggagc ttgatggcaa	
				gtaaaatgga tacctgctct agtaacctga ataacagcat atacaaaaag ctgttaactt	gtaaaatgga tacctgctct agtaacctga ataacagcat atacaaaaag ctgttaactt	
				aggaagagg actgctggga ggttaaaaaa aaaagttaa aacctgagga	aggaagagg actgctggga ggttaaaaaa aaaagttaa aacctgagga	
				ttctattagt cccacccaa actttattga ttcacctctt aaacaacag atgtacgact	ttctattagt cccacccaa actttattga ttcacctctt aaacaacag atgtacgact	
				tgcatacctg ctttttatgg gagctgtcaa gcatgtatct ttgtcaatta ccagaaagat	tgcatacctg ctttttatgg gagctgtcaa gcatgtatct ttgtcaatta ccagaaagat	
				aacaggacga gatgacggtg ttattccaa ggaatattgc caatgtaca gtaataaatg	aacaggacga gatgacggtg ttattccaa ggaatattgc caatgtaca gtaataaatg	
				aatgtcactt ctggatatag ctaggtaga tatacatact tacatgtgtg tatatgtaga	aatgtcactt ctggatatag ctaggtaga tatacatact tacatgtgtg tatatgtaga	

324	4687	Thrombin Receptor	NP_001983.1	<p> tgtatgcaca cacatatatt atttgcaagt cagtatagaa taggcacttt aaaacactct ttccccgcac cccagcaatt atgaaaaataa tctctgattc cctgatttaa tatgcaaaagt ctaggttggt agagtttagc cctgaacatt tcatggtgtt catcaacagt gagagactcc atagtttggg cttgtaccac ttttgcaaat aagtgtattt tgaattgttt tgacggcaag gtttaagtta ttaagaggtta agacttagta ctatctgtgc gtagaagtct tagtgttttc aattttaaac atatccaagt ttgaattcct aaaattatgg aaacagatga aaagcctctg ttttgatatg ggtagatatt tttacatttt acacactgta cacataagcc aaaactgagc ataagtcctc tagtgaatgt agctggctt tcagagtagg ctattcctga gagctgcatg tgtccgcccc cgatggagga ctccaggcag cagacacatg ccaggggccat gtcagacaca gattggccag aaaccttctt gctgagcctc acagcagtga gactggggcc actacattg ctccatctc ctgggattgg ctgtgaactg atcatgttta tgagaaactg gcaaaagcaga atgtgatatc ctaggaggtta atgacctga agacttttc taccatctt aaaaacaacg aaagaaaggca tggacttctg gatgcccac cactgggtgt aaacacatct agtagttgtt ctgaaatgtc agttctgata tggaaagcacc cattatgctg tgtggccact ccaataggtg ctgagtgtag agagtggaaat aagacagaga cctgccctca agagcaaaagt agatcatgca tagagtgtga tgtatgtga ataaatatgt ttcacacaaa caaggcctgt cagctaaaga agtttgaaca ttgggtttac tatttcttgt ggttataact taatgaaaaa aatgcagtagc aggacatata ttttttaaaa taagtctgat ttaattgggc actatttatt taaaaatgtt ttgctcaata gattgctcaa atcagggttt cttttaagaa tcaatcatgt cagtctgctt agaaataaca gaagaaaata gaattgacat tgaactctag gaaaattatt ctataatttc catttactta agacttaatt agacttttaa agcatttttt aacctcctaa gtatcaagta tagaaaaatct tcatggaaat cacaaagtaa ttggaaaatt aggttgaaaac atatctctta tcttacgaaa aaatggttagc attttaaaca aaatgaaaag ttgcaaggca aatgtttatt taaaagagca gccagggcg ggtggctcac gccctgaatc ccagcacttt gggagggctga ggcgggtgga tcacgaggtc aggatagcga gaccatcctg gctaaacacgg tgaacacctg ctctactaaa aatgcaaaaa aaattagccg ggcgtggtgg caggcacctg tagtcccagc tactcgggag gctgaggcag gagactggcg tgaacccagg aggcggacct tgtagtgagc cgagatcgcg ccactgtgct ccagcctggg caacagagca agactccatc tc MGPRRL1LVA ACFSLCGPLL SARTRARPE SKATNATLDP RSFLLRNPND KYEPFWEDEE P KNEGLTEYR IVSINKSSPL QKQLPAFISE DASGYLTSSW LTLFVPSVYT GVFWVSLPLN Homo sapiens IMAIVVFILK MKVKKPAVY MLHLATADVL FVSVLPFKIS YFSGSDWQF GSELCRFVTA AFYCNMYASI LLMTVISIDR FLAVVPMQS LSWRTLGRAS FTCLAIWALA IAGVPLVLK EQTIQVPLGN ITTCHDVINE TLLEGYYAYY FSFSAVFFF VPLIISTVCY VSIIRCLSSS AVANRSKSR ALFLSAAVFC IFIICFGPTN VLLIAHYSFL SHTSTEEAY FAYLLCVCVS SISSCIDPLI YYYASSECR YVYSILCKE SSDPSSYNSS GQLWASKMDT CSSNLNNSIY KKLLT </p>	
325	4734	Thyrotropin Releasing Hormone Receptor	NM_003301	<p> tagcttcaag ccactgaaga tggaaaaacga gacagtcaat gaactgaacc aaacacagct A tcagccacga gcagtggtgg ccttagaata ccaggtggtc accatcttac ttgtactcat tatttgggc ctgggcattg taggcaacat catggtagtc ctggttgtca tgagaaccaa gcacatgagg accccacaa actgctacct ggtgagcctg gcagtagctg atctcatggt cttgggtggc gcaggcctcc ccaacataac agacagatc tacggttctt gggctcatgg </p>	Homo sapiens

326	4734	Thyrotropin Releasing Hormone Receptor	NP_003292.1	<p>ctatgttgga tgcctctgca ttacttacct ccagttatttg ggaattaatg catcctcttg ttcaataaca gcctttacca ttgagaggtg catagcaatc tgtcacccca tcaaaagccca gtttctctgc acattttcca gagccaaaa gattatcatc ttgtctggtg ctttcacatc tctttactgt atgtctggtg tcttctggtg gtagctcaat attagcactt acaagatgc tattgtgata tcctgtggtg acaagatctc caggaattac tactcaccta ttacaccta ggactttggt gtcttttatg ttgtgccaat gatcctggct accgtctctt atggattcat agctagaatc cttttcttaa atccattcc ttcatgctct aaagaaaaa ctaagacatg gaaaaatgat tcaaccatc agaacacaaa tctgaatga aatacctta atagatgtt caacagcaca gtatcttcaa ggaagcaggt cacaagatg ctggcagtg ttgtaattct gtttgcccct ttatggatgc cctacaggac tctagtgtgt gtaaacatc ttcttccag tcttttccaa gaaaattggt tttgtctct ttgcagaatt tgcattatc tcaacagtgc catcaaccg gtgatttaca atctcatgtc ccagaaattc cgtgcagcct tcagaaagct ctgcaactgc aagcagaagc caacagagaa accgtctaac tacagtgtg ccctaaatta cagcgtcatc aaggagtcag accatcttcag cacagagcct gatgatatca ctgtcactga cacttacctg tctgccacaa aagtgtcttt tgatgacacc tgcctggctt ctgaggtatc ctttagccaa agttgattca tgaattagaa gaaaatggat gacaaagaaa ttgagaatct gtgcagtcac caacaaaagg gagaacatgg ccaatagtca tatgtgaaga cagagcagat cagtccttgt caatgctcta acaaacccg</p>	Homo sapiens
327	4944	Angiotensin II Type 1 Receptor	NM_000685	<p>LVLIICGLGI VGNIMVVLV MRTKHMRTPT P WYGYVGCIC ITYLYLGIN ASSCSITAF FELDLNIST YKDAIVISCG NPIPSDPKEN SKTWKNDSTH PYRTLIVVNS FLSSPFQENW PTEKPANYSV ALNYSVIKES SEVSFSQS</p> <p>agccaggacc ccaggcagca A tctgccgggc cgcgccggtg cgacacagccg ggacgcccag gcgggacgtg acgcagcgcc gctggggttt tatctgaata ttgatatagt gtttgcaaca ctgaagatgg tattaaaga tatttgtcat gattcctact gcttggtggt gatagtcatt ttttgaattt agcactggct acacagctat ggaataccg gcgtcagttt caacctgtac acctggctat tgttcacca tcacctgcac catcattgg gaaatgtatt tttcattgag ccttcaccga</p>	Homo sapiens

328	4944	Angiotensin II Type 1 Receptor	NP_000676.1	<p>gggctgggcc tgacaaaaa taaactgggt ttctgtttc ctttttgat cattttaca agttatactc ttatttgaa ggcctaaag aagccttatg aaattcagaa gaacaaacca agaaatgatg atatttttaa gataattatg gcaattgtgc tttttttttt cttttcctgg attccccacc aaatattcac ttctgtgat gattgattc aactaggcat catacgtgac tgtagaattg cagatattgt ggacacggcc ttgcctatca ccatgtgat agcttatttt aacaattgcc tgaatcctct tttttatggc ttctgtggga aaaaatttaa agatatattt ctccagcttc taaaatatat tccccaaa gccaaatccc actcaaacct ttcaacaaaa atgagcacgc ttctctaccg cccctcagat aatgtaagct catccacca gaagcctgca ccatgttttg aggttgatg acatgttcga aacctgtcca taaagtaatt ttgtgaaaga aggagcaaga gaacattcct ctgcagcact tcaactacca atgagcata gctacttttc agaattgaag gagaaaatgc attatgtgga ctgaaccgac ttttctaaaag ctctgaacaa agcttttct ttctttttgc aacaagacaa agcaaaagcca cattttgcat tagacagatg acggctgctc gaagaacaat gtcagaaact cgatgaatgt gttgatttga gaaattttac tgacagaaat gcaatctccc tagcctgctt ttgtcctgtt attttttatt tccacataaa ggtatttaga atatatataa tcgttagagg agcaacagga gatgagagtt ccagattgtt ctgtccagtt tccaaaggcc agtaaagttt tcgtccgggt ttccagctat tagcaactgt gtacacactg cacctggtac tgacattttt gtacaaagat atgctaagca gtatgctgca agttgcagat ctttttgta aattcaacct gtgtcttata ggtttacact gccaaaacaa tgcccgtaaag atggcttatt tgtataatgg tgttactaaa gtccacataa aaagttaaac tacttgtaaa ggtgctgcac tgggtcccaag tagtagtgct ctccagtagt attagtttga tttaatatct gagagtgta tatagtttgt ggtaaaaaga ttatatatca taaagtatgc ttctctgttt aaaaaagta tatattctac acatatatat atatgtatat ctatatctct aaactgctgt taattgatta aaactggca agtttatatt tactttaaa taaaaaat ttattgc</p>	Homo sapiens
329	4946	Angiotensin II Type 2 Receptor	NM_000686	<p>TVASVFLNL ALADLCFLLT LPLWAVYTAM EYRWPFNGYL CKIASASVSF NLYASVFLLT CLSIDRYLAI VHPKSRLLR TMLVAKVTCI IIMLLAGLAS LPALIHNRVF FIENTNITVC AFHYESQNST LPIGLGLTKN ILGFLFPFLI ILTSYTLIWK ALKKAYEIQK NKPRNDDIFK IIMAVLFFFF PSWIPHQIFT FLDVLIQLGI IRDCRIADIV DTAMPITICI AYFNNCLNPL FYGLGKKFK RYFLQLLKYI PPKAKSHSNL STKMSTLSYR PSDNVSSSTK KPAPCFEVE acgtccacgc gctgagaga acgagtaagc aagaattcaa agcattctgc agcctgaatt A ttgaaggagt gtgttttaggc actaagcaag ctgattttatg ataaactgctt taaacttcaa caaccaaaag cataagaact agagctgct gactttcaa tatgaaggcc aactccacc ttgcccactac tagcaaaaac attaccagc gtcttcaact cggtctgtg aactctctg gcaacaatga gttacactg aactgttcac agaaaccatt agataagcat ttagatgcaa ttcctattct ttactacatt atatttgtaa ttggtattct ggtcaatatt gtcgtggtta cactgttttg ttgtcaaaa ggtcctaaaa aggtttctag catatacatc ttcaacctcg ctgtggctga ttactcctt ttggctactc ttctctatg ggcaacctat tattcttata gatagactg gctctttgga cctgtgatgt gcaaaagtttt tggttctttt cttaccctga acatgtttgc aagcattttt ttatcacct gcattgagtg tgataggtac caatctgtca tctaccctt tctgtctcaa agaagaatc cctgggaagc atcttatata gtccctctg</p>	Homo sapiens

330	4946	Angiotensin II Type 2 Receptor	NP_000677.1	<p> ttgtgtgtat ggctgtttg tcctcattgc caacatttta ttttcgagac gtcagaacca ttgaatactt agagtgaaat gcttgcatga accgtttccc accgtgagaa tatgcccatt ggtcagctgg gattgcttta atgaaaaata tcccttggtt tattatccct ttaatttca tagcaacatg ctatttttga attagaaaac acttactagc gagcaatagc tatgggaaga acaggataac ccgtgaccaa gtctgaaga tggcagctgc tgtgtttctg gccttcacat ttgtgtgctt tccttccat gttctgacct tccctgagtc tctggcctgg atgggtgtca ttaatagtct cgaagtata gcagtcattg accctggcact tccctttgcc atccctttgg gattcaccaa cagctgcgtt aatccgtttc tgtattgttt tgttggaac cggttccaac agaagctccg cagtgtgttt aggtttccaa ttacttggct ccaagggaag agagagagta tgtcttgccg gaaaagcagt tctcttagag aatggagac ctttctgtct taaacggaga gcaaatgca tgaatacaac atggctactt gctttgaggc tcaccagaat ttttttaag tggttttaat aaaaataaa aatttccctt aatctttctt gaatcttctg aaaccaaagt taactatggt tatcgtccag tgactttcag gaatgccccat tgttttctga tatgtttgta caagatttca ttgttgagac atatttaca cctagagata actgttgata tatctcaaat tgaattaat aatagattgt gaataatgat ttggggattc agatttctct ttgaacatg ctgtgtttc ttgtgggtt ttatatcca tttttatcag gatttctctt tgaaccagaa ccagtcttcc aactcattgc atcattaca agacaacatt gtaagagaga tgagcacttc taagttgagt atattataat agattagtag tggattattc aggttttagg catatgcttc tttaaaaaac ctataaatta tattctctct gcatttcact tgagtggagg ttatatgtta atctataact acatattgaa tagggctagg aatatagatt aaatcatact cctatgcttt agcttatttt tacagtata gaagcaaga tgtactataa catagaattg caatctataa tatttgtgtg ttcactaaac tctgaataag cactttttta aaaactttct actcatttta atgattgttt aaaggtttct attttctctg atactttgac catccttgag tggctgtttg attgttgtaa aatgtaaagg tccattttca atactgtgac ttttttagat tggctgtttg atatatagga cattgatttg atttttatta ttaatgcttt ggttctgggt tgtttcctaa aatatctggg tggcttaaaa aaaactttt aacttgtaat aaaccttaaa ctggcatagg aaatggatc cagaatgaa ttttgctaca tgggtctgag cgtggggcaa agagaccag tcaattacat gtttggtagc aaaaaaggaa cctgtcaggg cagtacaatg tgactttgaa aatatatacc gtgggggtag ttttacccta tatctataaa cactgtttgt tccagaatct gtatgattct atggagctat ttttaaccaa ttgcaggtct aga MKGNSTLATT SKNITSLHF GLVNISGNNE STLNCQKPS DKHLDAIPIL YYIFVIGFL P VNIVVTLFC CQKPKRVSS IYIFNLAVAD LLLLATLPLW ATYYSRYDW LFGPVMCKVF GSFLTLMFEA SIFFITCMV DRYSQSVIYFF IALMKNILGF IIPLFIATC YFGIRKHLK FRDVRTIEYL GVNACIMAF PEKYAQWSAG IALMKNILGF IIPLFIATC YFGIRKHLK TNSYGNRIT RDQVLKMAA VVLAFLIWL PFHVLTFDA LAMMGVINS EVIAVIDLAL PFAILLGFTN SCVNPFLYCF VGNRFQKLR SVFRVPITWL QKRESMSCR KSSSLREMET FVS </p>	Homo sapiens
331	5072	Pyrimidinerg ic Receptor P2Y4	NM_002565	<p> atggccagta cagagtcctc cctgttgaga tccctaggcc tcagcccagg tccctggcagc A agtgaggtgg agctggactg ttggtttgat gaggatttca agttcatcct gctgcctgtg agctatgcag ttgtctttgt gctgggcttg ggccttaacg ccccaacct atggctcttc atcttccgcc tccgaccctg ggatgcaacg gccacctaca tgttccacct ggcattgtca </p>	Homo sapiens

332	5072	Pyrimidinerg NP_002556.1 ic Receptor P2Y4	gacaccttgt atgtgtgtgc gctgcccacc ctcatctact attatgcagc ccacaaccac tggccctttg gcaactgagat ctgcaagttc gtcgcttttc tttctattg gaacctctac tgcaagtgtc tttctctcac ctgcatcagc gtgcaacgct acctgggcat ctgccacca cttcgggcaac tacgtctggg ccgcccctgc ctgcaagccc tctctgccc ggcagtttgg ttggtcgtag ccggtctgct ctgcccacac ctgttctttg tcacaaccag caacaaaggg accacggtcc tgtgccaatga caccactcgg cctgaagagt ttgaccacta tgtgcacttc agctcggcgg tcatggggct gctctttggc gtgcccgtgc tggtaactct tgtttgctat ggactcatgg ctgctgctct gtatcagccc ttgcaaggct ctgcacagtc gtcttctcgc ctcgcctctc tccgacacat agctgtgtgt ctgactgtct ttgctgtctg ctctgtgctc ttccacatca cccgcacat ttactacctg gccaggctgt tggaaagctga ctgccagta ctgaacattg tcaacgttgt ctataaagt actcggcccc tggccagtcg caacagctgc ctggatcctg tgctctactt gctcactgg gacaaatctc gactcagct ccgtcagctc tgtgtgtgtg gcaagcccca gcccgcacg gctgctctct cctggcact agtgtccctg cctgagata gcaagctgcag gtggcgccg acccccagg acagtagctg ctctactct agggcagata gattgtaa MASTESSILR SLGLSPGGS SEVELDCWFD EDFKILLPV SYAVFVLGL GLNAPTILWF P IFRLRPWDAT ATYMFHLALS DTLYVLSLPT LIYYAAHNNH WPFGEICKF VRFLFYWNLY CSVLFITCIS VHYLIGICHP LRALRWGRPR LAGLGLAVW LVVAGCLVFN LFFVTTSNKG TTVLCHDTR PEEFDHYVHF SSVMGLLFG VPCLVTLVY GLMARRLYQP LPGSAQSSSR LRLSLTIWV LTVFAVCFVP FHITRTIYL ARLEADCRV INIVNVYKV TRPIASANSC LDPVLYLITG DKYRRQLRQL CGGKPKQPRT AASSLALVSL PEDSSCRWAA TPQDSSCSTP RADRL	Homo sapiens
333	5117	Vasopressin NM_000706 V1A Receptor	taattgcttg aaggattttt tccagacagg tggctgtgaa acctttacc tattaccttc A catccctgaa ccatttcaat ctctgtcctc ctggtatatct tggagaaaaa gaaccaaac aacacagctt tcagttttta gacatttcc cccatcacaga acattgtctt acttgatctt cccgatgacc tcaacaacag gaaaggcagg tcccttcatt tccatttata agacgcacag accaggtatt atctagccac aggaagcagg actccagatt tcaagtcacg catctcaacg tgacaacctt ggtaaactct catgaacgga ctggtatgta aagtggaaat attactgaga actgcaatga ataaaaatctt ttgcattttt tgcctacgtt tcacagagggt tgatatattt ctgaggcaat taaatttata ccacggccc aatactgaaa cgttctgacc aacaaagtca tgctcctgca tctacacagc agataactgc agaaacggct tcccttcttc ctgtataaat tgctgaaaa cagctcccc ttgctgtccg tccgagcata tcttcaccaa cgttaaaaa gagctagggt agatcgcatt tctgctccc tccgcctctg cagagggggt ccagctgttc agagtaacgg attactaggt aggtgttgtt tccctctct tcccagggtc tcttctctct ctttgagatt gcctctttct tactcctgag cccagagcc gggcggtgtt tctgtccctt gcccggaca gcactgctg gatggccgt gtccggcagc tgctctttgt ccacccaaa agatgtcccc acgactcagt agtaaccaga cgggtcccc gaccactgc ggccaaattt ccgccatccc cgctgtggga atcaggcttt tccgcgcaaa aacccaggga atctagagaa aactccttaa gtccctagtc tccatagaga aaaccaggag acactcccc caaacccgc tgtgaataca ggcacagcag ccactggggc ctgaaaagtga tgagtgcgtt ctcccgctg caacatagg gtaataaata gcatgcatca agacgtttac taggaagaga tagctcttta	Homo sapiens

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aatggaaaca tgcgttacta aaatatgcag gtctgattcc cagaaataca acagaagtta
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334	5117	Vasopressin V1A Receptor	NP_000697.1	<p>atatttgaac aaagagagct catcatcagt cttaatatct agagaaaaact tcagagaaat</p> <p>tatgtttttca tccattaaaaa ttaatttgtg catcagaaaaa tgcagcctta aacagtgtcc</p> <p>aggagatggg atggtacctc ctaggagtag aagtgcctgg ggtgtaatga gctcctgctc</p> <p>attgtggcca gtttagagtt ctattagaag ctatcaatca ccttgcatct caaaatggta</p> <p>actttacaac tggcagtggc ctccttttgg ttctcacat attattggtc aagaaaaagca</p> <p>tgaaaactga gatgctgaag gtgagaggaa atgttgactg gccaaaaata tcttttttcc</p> <p>cccactgcaa ggttgtttta aagtcagatt tgtataagga aagccaaaatt ttattaaaaa</p> <p>agtagaaaaa gattgcttaa ggtactctgg actttctctt ggacattgta aacgtatttt</p> <p>gatcagattt acaagggtat cctgtgctat gctggacatt acaagatca ttatcttcat</p> <p>gtttggggaa ttc</p>	Homo sapiens
335	5118	Vasopressin V1B Receptor	NM_000707	<p>ctcagccgc tgctcaccag gcagagcgag cgggcttggc tgggcttcc tgcctgagc A</p> <p>gcgacaccga ctgctccgga ccgcgcctcc aagcaggctg aaggccttcc gctcttggct</p> <p>tccagaaaaa tttggagaaa gagaatttga ggggatttgg aggggtgtag cccctcccca</p> <p>gctttcttc tctccagaa gccctactct gcacagcgtc cccattctt cccgtcctga</p> <p>ttcccatct tctgacccc tctctctct tctctgggt cgatcccat cacttttct</p> <p>cttccgaat ctcactctcc cctctctct cctctgaacg atttccgct</p> <p>atttggagc ctctccctg tcattctcaa cgcttctct ttctctccac ctccctgccc</p> <p>actccattt atccatcaa cctctccact tggatccaca cctcccttc atccctccct</p> <p>cccagcaaac ctgtctcatg gattctgggc ctctgtggga tggcaacccc accctcggg</p> <p>gcacctctc tggccccaat gccacaacac ctgtgtggg ccgggatgag gagctggcca</p> <p>aggtggagat cggagtcttg gccactgtcc tgggtgtggc gaccgggggc aacctggctg</p> <p>tgctgtgac cctgggccag ctgggccgca agcgtccccg catgcacctg ttctgtctgc</p> <p>acttagccct gacagacctg gccgtggcg tcttccaggt gctgccacag ctgctgtggg</p> <p>acatcacta ccgcttccag ggcctcgacc tctgtgcag ggcctgcaag tacctgcagg</p> <p>tgctcagcat gtttgcctcc acctacatgc tgctggccat gacgtggac cgtacctgg</p> <p>ctgtctgtca cccctgccc agctccagc agccaggcca gtccacctac ctgctcatcg</p> <p>ctgtccctg gctgtggcc gccattctca gctccctca agtcttctt ttctccctgc</p> <p>gggaggtag ccagggtca ggggtgctgg actgtgggc agacttcggc ttcccttggg</p> <p>ggccacgggc ctacctcacc tggaccaccc tggctatctt cgttctgccc gtgacctgc</p> <p>tcacggcctg ctacagctc atctgccatg agatctgtaa aaacctaaaa gtcaagacac</p> <p>aggcctggcg ggtgggagga gggggctgga ggacttggga caggccctca ccttccacct</p> <p>tagctgccac cactcggggg ctgccatctc ggttcagcag catcaacacc atctcacggg</p> <p>ccaagatccg aacagtgaag atgacctttg tcactgtgct ggcctacatc gcttgcctgg</p> <p>ctcccttctt cagtgtccag atgtgtctcg tgtgggacaa gaatgcccct gatgaagatt</p>	Homo sapiens

Homo
sapiens

336 5118 Vasopressin NP_000698.1 MDSGPLWDAN PTPRGLSAP NATPWLGRD EELAKVEIGV LATVLVLTATG GNLAVLLTLG P

V1B Receptor

ccaccaatgt ggctttcacc atctctatgc ttttgggcaa cctcaacagc tgctgcaacc
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Homo
sapiens

337 5119 Vasopressin NM_000054

V2 Receptor

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338	5119	Vasopressin V2 Receptor	NP_000045.1	MLMASTTSAV ALARRGRRGH VGMVYASSYMI RNVEGGSGVT SERPGGRRRG PLEGAPFVLL ASSSLAKDTS S	PGHPSLPSP WAPIHVFIGH LAMTLDRHRA DCWACFAEPW RRTGVVTWIA HVSAAVAKTV NPWIYASFSS SVSSELSRL	TRDPLLARAE FQVLPQLAWK GSGAHWNRPV LMVFVAPTIG IACQVLIIFR VLCWAPFFLV CCARGTRPPS	LALLSIVEFA ATDRFRGPD LVAWAFSLLL IAACQVLIIFR QLMAAWDPEA LGPQDESCIT	Homo sapiens	
339	5133	Peropsin	NM_006583	gaataagcct ataaatttagg aacacaaatat taatagttct ttattaacct cctcagatct tgaatatattt acctgacct tgattctggg ctagttatgc gatcttttgt tgatgtttta gcactgagtc tcattgatctg cttttggtga aatcttctac caatgcttgc ccatggatgt acgctatcaa gatcaagtgc tgcttccgtt acttattgct	tcgataaatta caacagttca tggtgcaact gggcattctc ggctgttact gtatggaaatg ttttggaaatg ctgccttctc agcctggatc ccagatcct gtcttacacc ctgctattac cctcaacaga catgtttctg ccaaaagaag atcttataac catgttcaaa atctcaaac aacactttag agacatggat tgtgcactct catctcctt	tgaaggggtg gactctaaa tacttgatta attaagtaca gataagggg tggaattttg gcaagcattg gacgtaggga aatggcctgt actgggtgcta atgacagtta catgtcacgc gactggtcag gtggcatggg atctctccc ccctgcattt tgtcagactc ccattggctt tttttgaca cattgtccta ggctgctgta gatgaattag	ttcggatatct atgaagatgg tggcaggat aggaacttgc tcagtagcat gatacgacg gattactcac gaagaatgac tttgggcttt cgtgtacct ttgcgataaa tatccattaa atcagataga cccttattc ccatggccat atgtgtgtgc cccttattc accaaacaat tgtgaagaat ctggaataag tttaaatatg agctcctcaa gtgtgttcc ttaagggtccc	atgctaaaga tcacagactg ataatgata cccttgacag accagtgc atgtctgtga ttatgggctt ctgtttgcaa tttcggaggg gctgtgaca agataattac agaaaaagac agccattta gcacagctcg tgatatatca ctttcttct	Homo sapiens

340	5133	Peropsin	NP_006574.1	ccctattatg gcatgcatta cactgtactg atgaccttta acttgccctg ctcc	Homo sapiens
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				VDRYLTICLP DVGRMTTNT YIGLIGAWI NGLFWALMPI IGWASYAPDP TGATCTINWR	
				KNDRSFVSYT MTVIAINFIV PLTVMFYCYI HVTLSIKHHT TSDCTESLNR DMSDQIDVTK	
				MSVIMICMFL VAWSPYSIVC LWASEGDPKK IPPPMALIIAP LFAKSSTFYN PCIYVWANKK	
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341	5519	Brain-Specific Angiogenesis Inhibitor 1	NM_001702	ggactttaga agccgttgct gccctctctg tcacctgaag cggggccctc tccatccca A	Homo sapiens
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343	5520	Brain-Specific Angiogenesis Inhibitor 2	NM_001703	<p>GDGDIFFKLD SELSRAQEKALDTSYVILPTATATLRPKPK EEPKYSIHID QMPQTRLIHL STAPEASLEP RSPPSRQPPSGPPEAPPAQ PPPPPPPPP PPOQLPPPP NLEPAPPSLG DPGEPAHPG PSTGPSTKNE NVATLSVSSL ERRKSYAEL DFEKIMHTRK RHQDMFQDLN RKLQHAEEKD KEVLGPDSPK EKQQTENKRP WESLRKAHGT PTWVKELEP LQPSPLELRS VWEVRSATI PLVGQDIIDL QTEV</p> <p>gcccgcggg agagcgggag cctgggccc cgcgcggggt gcagctacct accctgcgcc A cgccagggt ccgacttag ggaaggcaaa cttggccccc gtggccgccc cgcgcaggc cgcccccgc tccgtctgt gacggcgccc aggaatacca cagcagtgat acatgtgacg tccacactga cagtgccctc ctgtgggcat ggtcagggt gtgcgcatgt cctggcacac tggtgttaac tccgcccctt tcttccctc tcagtaaaag aagattacgc ggtgacatgc ctcacagctg atcacgacac acggggatgg agagcaagag ttatggagaa tacagggtgg atgggcaagg gacataggat gacccagcc cagcccgcc cccagtgctt tactgtctgt gattctgtcc ctggcctgg ccaccgctt gctgcaggac cttcttccca ccatgcctc ggcctgggt gtgctctacg gggccttct cccacccaag tactccctc accctgcctt caaccgccc tggaacctgg agaacctga cccacccaag tactccctc accctgcctt caaccgccc gagcaggtgt gcgcacactt tgccccccg cgtgctccc tggaccacta cctgggtcaac tttacctgcc tgcggcctag ccccgaggag cgggtggccc agcggagatc agagtgggg cgccagaag aggaggagg cagggcgga cgggggtgg agctgtgcag cggctcaggc ccctttacct tctgacct cgacaagaac tctgtgcagc tgtgcctgtc ggtgagccc tccgaggccc cgcgctgtc tagccaattc accctgtgtg tgcctgccc cggagtgag ctcatcaaca acaacaactc cagggcctgc ggtttgtct accctgcctg tgcctgccc gagtgtggc cgcctgcgg gggcgggctc caccaccac acatctccag gccctcctg tgcacacac ggagaggcg cctgtgtgc cgggggccc cccacacctg ctgaggccga ttgtcactcg ctgtccaatg cctgtgtgc cacaaccgag atgagatag gtgaggagcc ggaagaggaa gggagcagca aaaccagtg gccgaggtct gcagatgagc ctgggctata catggcgacg ccgaaaagtga aaccagtg ggaagtgtcc cgtggagcg tgtgttccct gacgtgtggg acaggcgacc cggcggtga cgcctcctgt gtgtcctccc cctatgggac cctgtgcagc cagggtctgc aggtgaggac cccctgcaac aattcagcca cctgcccagt gcacggcgtg ggcccccctg gggggctcctg gagcctgtgc tcccagact ggggggggg gtcccggagc tgggaggagt gggggctcctg ccccgagcc ccccgagcc cctgcgagg tccgtgactg cgatgcgga cctgcgtgc ccccgagcc ccccgagcc cctgcgagg gcaatgggtt cagactaagc tctgcagtat ggtgcctgc cgtgtggaag gcaatgggtt agaatgggtt ccctggggcc catgtccac gtctgtgccc aatgggaccc aacagcgag ccggaagtgc agcgtggcg gccagcctg ggcacatgc acgggtgccc tcaactgac ccggaggtgc agcaacctg agtgcccgcc cactgatgc agtgggggc gctgtgccc gctggagctg tgctctaaga cgtgtgacac aggtgggag cgcgcttcc gcatgtgcca ggcacgggc acgcagggct accctgcga gggcaccgga gaggaggtga agcctgttag tgagaagagg tgtccagcct tccatgagat gtgcaggat gactacgtga tgcgtatgac gtggaagaag gcagctgctg gcgagatcat ctacaacaag tgcctccga atgcctcagg gtctgcccag cgccgctgtc tctcagtg ccaaggcgtg gcgtactggg ggcgtcccag cttgtctgc tgcatctccc atgagtaccg ctacctgtat ctgtcactta gggagcacct ggccaaagggg</p>	Homo sapiens
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344	5520	Brain-Specific Angiogenesis Inhibitor 2	NP_001694.1	<p>ccgcccagacac ccagcgcccc ccaagtgtccc gagccagggg agcgagcgcc gaccatgcct cgacacgtgc cggctcttac catgaagatg ggctccctgg agcgaaagaa attacgggtat tcagacctgg acttgaggt gatcacacc cggaaacggc attcagaact ctaccacgag ctcaaccaga agttccacac ttccgaccg taccgagcc agtccacggc caagagggag aagcggtgga gtgtgtctc gggtggggcg gccgagcga cgtgtgac cgataagccc agcctgggg agcggcccag cttgtcccaa catggcgcc atcagagctg gagcaccttc aatctatga cactgggctc gctgcccccc aagccccgag aacggctgac tctgcaccgg gcagagcct gggagccac agaaccacg gatggtgact tccagacaga ggtgtgagtg ccacgctgga ctgcccactg catataaata tataatctc tctatttca cactccactt tggaactacc caggagccag cgccctctcc cctctccga gggctgggca gggagggcgc gtggactcag ccaggtggg gagccggac atggcttggc ctggggctcc agggcccttc ctgtttctc agagggccct cagccactgg aaccccatct tcagcccgag ctgtccgctc ctgtcccggg ctggggagg gggaggggaa cttgttggg aataaacttc actctgtgg MTPACPLLLS VILSLRLATA FDPAPSACSA LASGLYGAF SLQDLFTTIA SGCSWTLENP p</p> <p>DPTKYSLYLR FNRQEQVCAH FAPRLPLDH YLVNFTCLRP SPEEAVAQAE SEVGRPEEEE AEAAAGLELC SGSGPFTFLH FDKNFVQLCL SAEPSEAPRL LAPAALAFRF VEVLLINNN SSQFTCGVLC RWSEECGRAA GRACGFAQPG CSCPGEGAG STTTSPGPP AAHTLSNALV PGGPAPPAEA DLHSGSSNDL FTTEMRYGEE PEEPKVKTQ WPSADEPGL YMAQTGDPA EWSWSPVCS LTCGQGLQVR TRSCVSSPYG TLCSGPLRET PCNNSATCP VHGVWEWGS WSLCSRSGR GSRSMRTCV PQHGGKACE GPELQTKLCS MAACPVEGQW LEWGPWGPCS TSCANGTQQR SRKCSVAGPA WATCTGALTD TRECSNLECP ATDSKMGPNW AWSLCSKTC TGWQRRFRMC QATGTQGYPC EGTGEEVKPC SEKRCAPAFHE MCRDEYVMLM TWKKAAGEI IYNKCPFNAS GSASRCLLS AQGVAYWGLP SFARCISHEY RYLYLSLREH LAKQRMLAG EGMSQVVRSL QELLARITYY SGDLLEFSDI LRNVTDTEFR ATYVPSADDV QREFFQVSEFM VDAENKEWD DAQVSPGSV HLLRVDEFI HLVGDAKAF QSSLIIVTDNL VISIQREPVS AVSSDITFPM RGRGMKDMV RHSEDRLEFLP KEVLSLSPG KPATSGAAGS PGRGRGPSTV PPGPGHSHQR LLPADPDESS YFVIGAVLYR TLGLILPPPR PFLAVTSRVM TVTVRPPTOP PAEPLITVEL SYINGTDP HCASWDYSRA DASSGDWDE NCQTLETQAA HTRCQCQHL TEAVLAQPPK DLLELAGSP SVPLVIGCAV SCMLLTLLA IYAAFWRFIK SERSIILNF CLSILASNIL ILVGQSRVLS KGVCTMTAAE LHFELSSFC WVLTEAWQSY LAVIGMRTR LVRKRFLCLG WGLPALVAV SVGFTRTKGY GTSSYCWLSL EGGLEYAFVG PAAVIVLNM LIGIIVFNKL MARDGISDKS KKQAGSERC PWASLLIPCS ACQAVPSPL SSASARNAMA SLWSSCVVLP LLALTWMSAV LAMTDRRSVL FQALFAVENS AQGFVITAVH CFLREVQDV VKQMVGVCRA DESESDSC KNGQLQILSD FEKDVLDLACQ TVLFKEVNTC NPSTITGLS RLSLDEDEEP KSCIVGPEG LSFSPLPGNI LVPMAASPGL GEPFPPQEAN PVVMCGEGL RQLDLTLWRP TEPGSEGDYM VLPRRTLSLQ PGGGGGGED APRARPEGTP RRAKTVAHT EGYPSFLSVD HSLGLGPAY GSLQNPYGMT FQPPPTPSA QVPEPERS RTMPTVPGS TMKMGSLERK KLRYSDLDFE VMHTRKRHSE LYHELNQKFH TFDYRSQST AKREKRSVS SGGAERSVC TDKPSGERP SLQSHRRHQ SLSQSHRRHQ WSTFKSMTLG SLPPKPRERL TLHRAAAWEP TEPPDGDFTQ EV</p>	Homo sapiens
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345	5521	Brain-Specific Angiogenesis Inhibitor 3	NM_001704	gataaacaac ttacagaggg caaatgacat aggatgaagg ctgttcgtaa cctgctgatt A	Homo sapiens
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				tggtcaactt tgggtgaagg agtcatttat ggtcgtgatt ctgtaagtga aatgtttcct	
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				tacctgaaat ttcccaaaa ggaccttagc tgccttaact ttccactcct ggcttatcag	
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346	5521	Brain-Specific Angiogenesis Inhibitor 3	NP_001695.1	<p>aagcacaatg tatatatatta tgcagttttt aaagtttata acagttctgtt tggccattac tacaactttt actttataat ataaaagcaa agttttgtc attaatgaa tgtttgttg gtacattct tcattgcttt aaatgaata agtaataat ctcaattta tatgaataat atatttaca tctttattat tgcagttttc tctagaaagc tctgagaagc tttctgtct gcagctgtgt ataaaatatt taaaatgttg tatggtgtaa ataaactttt gctacat MKAVRNLLIY IFSTYLLVMF GFNAAQDFWC STLVKGVIYG SYSVSEMFPK NFNCTWTLE P NPDPKYSIY LKFSKKDLSC SNFSLAYQK DHFSHEKIKD LLRNHSIMQ LCNSKNAFVF LOYDNFIQI RRVFPTNFG LQKKGEEDQ SLILLNNVVL PLNEQTEGCL TQELQTTQVC SENGRTEGCG IMYTKCTCPQ HLGEWGIDDQ HEKRVPEQA DAAKFMAQTG ESGVEEWSQW NLTRAKRPP KEFGMMGDH TIKSQRPVS PYGTHCSGPL RESRVCNNTA LCPVHGWEW WSPWSLCSFT STCSVTCGQG SQVRTRTCVS PCEGPETHK PCNIALCPVD GQWQEWSSWS QCSVTCNSGT CGRGQRTTR SCTPPOYGR AHGSECRGP WAESRECYNP ECTANGQWNQ WGHWSGCSKS CDGGWERRIR QORSRQCTAA QCEGTGEVR RCSEQRCPAP YEICPEDYLM SMVWKRTAG DLAFNQCPLN TCQGAVITGQ QCEGTGEVR QSEFARCSN KRASYIPASD EHLAKGQML AGDGMSTVK ATGTTSTRCS LSLHGVAWE EILRNVTDTF EYRHLQHSIK GVNFFQIVS NLLDEENKEK TLDLTQRKN FYAGDILMSV FIHIVGMGM DFQNSYLMTG NVVASIQKLP AASVLTIDNF WEDAQIYPG SIELMQVIED FIHIVGMGM DFQNSYLMTG NVVASIQKLP AASVLTIDNF PMKGRKGMVD WARNSDRW IPKSIFTVS SKELDESSVF VLGAVALYKLN DLILPTLRNY TVINSKIIV TIRPEKTTD SFLEIELAHL ANGLINPYCV LWDDSKTNS LGTWSTQCK TVLTDASHTK CLCDRLSTFA ILAQQPREII MESSGTPSVT LIVSGLSCL ALITLAVVVA ALWRYIRSER SIILINFCLS IISSNIIIV GQOTHNKSI CTTTTAFLEH FFLASFQWVL TEAWQSYMAV TGKIRTRLIR KRFLCLGWGL PALVAVATSVG FTRTKGYGTD HYCWLSEGG LLYAFVGPA AVVLVNMVIG ILVENKLVS RAGQMSEPHS GLTLKCAKCG VSTTALSAT TASNAMASLW SSCVLPILA DTWMSAVLAM TDKRSILFQI LFAVFDLQ FVIMVHCIL RREVQDAFRC RLNCQDPIN ADSSSPFNG HAQIMTDFEK DVDIACRSVL HKDIGPCRAA TITGTLRSIS LNDDEEEKGT NPEGLSYSTL PGNVISKVII QOPTGLHMPM SMNELSNPCL KENSELRRT VYLCTDDNLR GADMDIVHPQ ERMESDYIV MPRSSVNNQP SMKEESKMI GMETLPHERL LHYKVNPEFN MNPPVMDQFN MNLEQHLAPQ EHMQLPFEP RTAVKNFMS ELDDNAGLSR SETGSTISMS SLERRKSRY SLDFFKVMHT RKRHMLFQE LNQKFQTLDR FRDIPNTSSM ENPAPNKNPW DTFKNPSEYP HYTTINVLDT EAKDALELRP AEWEKCLNLP LDVQEGDFQT EV</p>	Homo sapiens
347	6031	SIV/HIV Receptor BONZO	NM_006564	<p>gcagaccttg cttcatgagc aagctcatct ctggacaaaa atctctgctg A gtgttcatca gaacagacac catggcagag catgattacc atgaagacta tgggttcagc agtttcaatg acagagacca ggaggagcat caagacttcc tgcagttcag caaggtcttt ctgccctgca tgtacctggt ggtgtttgtc tgtggtctg tggggaactc tctggtgctg gtcatatcca tcttctacca taagttgcag agcctgacgg atgtgttctt ggtgaacctt ccctggctg acctggtgtt tgtctgcat ctgcccttct ggcctatgc aggcattcat gaatgggtgt ttggccaggt catgtgcaag agcctactgg gcattacac tattaactc tacacgtcca tgcctatcct cacctgcatc actgtggatc gtttcatgt agtgggttaag gccaccaagg cctacaacca gcaagccaag aggatgacct ggggcaaggt caccagctg ctcatctggg tgatatccct gctggtttcc ttgccccaaa ttatctatgg caatgtcttt</p>	Homo sapiens

348	6031	SIV/HIV Receptor BON20	NP_006555.1	<p>aatctcgaca agctcatatg tggttaccat gacgaggcaa ttccactgt ggttcttgcc accagatga cactgggggtt cttcttgcca ctgctcacca tgattgtctg ctattcagtc ataatcaaaa cactgcttca tgctggaggc ttccagaagc acagatctct aaagatcatc ttcctgtgta tggctgtgtt cctgctgacc cagatgacct tcaacctcat gaagtccatc cgagcacac actgggaata ctatgccatg ggcctgctt accagcttct actacacct catggtgaca gaggccatcg catacctgag ggcctgctt aacctgttg cctatgacct tgcagcctg aagtttcgaa agaacttctg gaaacttgag aagacattg gttgacctt ttaccttggg gtctcacatc aatggaaatc ttctgaggc aatccaaga ctttttctgc ctcccacaat gtggaggcca ccagcatgtt ccagttatag gccttgccag ggtttcgaga agctgctctg gaatttgcaa gtcatggctg tgccctcttg atgtggtgag gcaggcttg ttatatgctt gcgcatctc atggagaagt taccagacac tctggtggt ttggaatgct tcttctcagg catgaacatg tactgttctc ttcttgaaca ctcatgctga aagcccaagt agggggtcta aaatttttaa ggactttct tcttccatct ccaagaatgc tgaacccaag ggggatgaca tgtgactcct atgatctcag ttctctcttg attgggactg gggctgaagg ttgaagaggt gagcacggcc aacaaagctg ttgatggtag gtggcacact ggggtgccaa gctcagaagg ctctctgac tactgggcaa agagtgtaga tcagagcagc agtgaacaaa agtgcaggca ccaccaggca cctcacagaa atgagatcag gctctgctc accttgggct ttgacttttg tataggtaga tgttcagatt gctttgatta atccagaata actagcacca gggactatga atgggcaaaa ctgaattata agaggctgat aattccagtg gtccatggaa tgcttgaaaa atgtgcaaaa cagcgtttta gactgtaatg aatctaagca gcatttctga agtggactct ttgggtggctt tgcattttta aaatgaaatt ttccaatgct tgccacacaa acgtatgtaa atgtatatc ccacacatc acacacatat gtcatatatt actagcatat gagtctcata gctaagaaat aaaactgtta agtctccaa act</p>	Homo sapiens
349	6204	Lysophosphat idic Acid Receptor Edg4	NM_004720	<p>KLQSLTDVFL VNLPLADLVE VCTLPFWAYA GIHEWVFGQV MCKSLGIYT INFYTSMLIL TCITVDRFIV VVKATKAYNQ QAKRMTWGV TSLLIWIWISL LVSLPQIIYG NVFNLDKILIC GYHDEAISTV VLATQMTLGF FLPLLTMIVC YSVIIKTLH AGGFQKHRSL KIIFLVMVAF LLTQMPFNLM KFIRSTHWEY YAMTSFHYTI MVTEAIAVLR ACLNPVLYAF VSLKFRKNFW KLVKDIGCLP YLGVSHQWKS SEDNSKTFSA SHNVEATSMF QL</p>	Homo sapiens

350	6204	Lysophosphat NP_004711.2 idic Acid Receptor Edg4	ctggtcaaga ctgtgtgtcat catcctgggg gcgttcgttg tctgttgga accaggccag gtgtactgc tctgtgatgg tttaggctgt gactcctgca atgtcctggc tgtagaaaag tacttcttac tgttgccga ggccaactca ctggtcaatg ctgctgtgta ctcttgccga gatgctgaga tgcgcgcgc ctctccgcgc ctctctgtct ggcgtgtcct ccgcccagtc accgcgagt ctgtccacta tacatcctct gccacgggag gtgccagcac tgcctcatg cttcccga accggccacc actgatggac tccacccttt agttaccttg aacttcagcg gtacgcgga agcaacaat ccacagcccc tgatgacttg tgggtgctcc tggctcaacc caaccaacag gactgactg	Homo sapiens
351	6213	C-C Chemokine Receptor 5	RRFHQPIYYL LGNLAADLF AGVAYLFMF HTGPRAPRLS LEGWFLRQGL LDTSLTASVA TLIAIAVERH RSVNAVQLHS RLPRGRVVML IVGVWVAALG IGLLPAHSWH CLCALDRCSR MAPLLSRSYL AVWALSSLLV FLLMVAVYTR IFFVYVRRVQ RMAEHVSCHP RYRETTLSLV KTVIILGAF VVCWTPGQV LLLDGLGES CNVLAKEYF LLLAEANSLV NAAVYSCRDA EMRRTFRLR CCACLRQSTR ESHYTSSAQ GGASTRIMLP ENGHPLMDST L cttcagatag attatatctg gactgaagga tcttgccacc tacgtatctg gcatagtatt A ctgtgtagt ggatgagcag agaacaaaa caaaataatc cagtgaagaa agcccgtaaa taaaccttca gaccagagat ctattctcca gcttatttta agctcaactt aaaaaaaga actgttctct gattcttttc gcttcaata cacttaata ttttaactca cctccttca aaagaaacag catttctac ttttatactg tctatatgat tgatttgac agtccatctg gccagaaag ctgagacatc cgttccccta caagaaactc tccccgggtg gaacaaagt gattatcaag tgtcaagtc aatctatgac atcaattatt atacatcgga gccctgcca aaaatcaatg tgaagcaaat cgcagccgc cctctgctc cgtctactc actggtgttc atctttggtt ttgtgggcaa catgctggtc atctcactc tgataaactg caaaaggtg aagagcatga ctgacatcta cctgctcaac ctggccatct ctgacctgtt tttccttctt actgtccctt tctgggctca ctatgctgc gccagtggtg actttgaaa tacaatgtgt caactcttga cagggtctta ttttataggc tcttctctg gaatcttctt catcatcctc ctgacacatc ataggtacct ggcgtgctc catgctgtgt ttgctttaa agccaggacg gtcacctttg ggtgtgtgac aagtgtgac acttgggtg tggctgtgtt tgcgtctctc ccaggaatca tctttaccag atctcaaaa gaaggtcttc attacacctg cagctctcat tttccatata gtcagtatca attctggaag aatttccaga cattaaagat agtcatcttg gggctggtcc tgcctgtgtc tgctatggtc atctgctact cgggaatcct aaaaactctg cttgcgtgtc gaaatgagaa gaagagggcac agggctgtga ggcctatctt caccatcatg attgtttatt tctcttctg ggtccctac aacattgtcc tctcctgaa cacttccag gaattctttg gctgaataa tgcagtagc tctaacagg tggaccaag tatgcaggtg acagagactc ttgggatgac gactgtgtc atcaaccca tcatctatgc cttgtcggg gagaagtcca gaaactacct cttagtcttc ttccaaaagc acattgcca acgttctgc aaatgtgtt ctattttcca gcaagaggtc cccgagcgag caagctcagt ttacaccga tccactgggg agcaggaaat atctgtgggc ttgtgacacg gactcaagt ggctggtgac ccagtacag ttgtgcacat ggttagttt tcatcacacg cctgggtgg ggtgggtg ggagaggtct tttttaaaag gaagttactg ttatagagg tctaatgatt atccatttat ttggcatctg tttaaagtag attagatctt ttaagcccat caattataga aagccaaac	Homo sapiens

aaaaatagtgtt gatgaaaaat agcaaccttt ttatctcccc ttacatgca tcaagttatt
 gacaaactct ccttcactc cgaagttcc ttatgtatat ttaaaagaaa gcctcagaga
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 cttgacggca ttgctccgtc taagtcatga gctgagcagg gagatcctgg ttggtgttgc
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 ggggggggct ccttaggtac ttattccaga tgccttctcc agacaaacca gaatgggggt
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 tagtaagtgg tgagaactac tcagggaatg aaggtgtcag aataataaga ggtgctactg
 actttctcag cctctgaata tgaacgtgga gcatgtggc tgtcagcagg aagcaacgaa
 gggaaatgct ttctcttttg ctcttaagt gtggagagtg caacagtagc ataggacctt
 accctctggg ccaagtcaaa gacattctga catcttagta tttgcatatt cttatgtatg
 tgaaggttac aaattgcttg aaagaaaaa tgcattcaat aaaaaaaccc ttcta
 MDYQVSSPIY DINYTSEPC QKINVKQIAA RLPLPLYSLV FIFGVGNML VILLINCKR P
 LKSMTDIYLL NLAISDLFFL LTVPEFAHYA AAQWDFGNM COLLTLGLYFI GFSGIFIFI
 LLTIDRYLAV VHAFAALKAR TVTFGVVTSV ITWVAVFAS LPGIIFTRSQ KEGLHYTCSS
 HEPYSQYQFW KNFQTLKIVI LGLVPLLV VICYSGLKT LLRCRNEKR HRAVRLIFTI
 MIVYFLWAP YNIVLLNTE QEFFGLNCS SSNRLDQAMQ VTETLGMTHC CINPIYAFV
 GEKFRNYLLV FFQKHIARKF CKCCSIFQOE APERASSVYT RSTGEQEISV GL

6213

352

C-C

Chemokine
Receptor 5

NP_000570.1

Homo
sapiens

[illegible]

356	6446	Pael Receptor (GPR37)	NP_005293.1	<p>gacctccagc tcttccttca gatctcagag gaggaagaga aggttcccc aggcgctggc atctccggc gtagccagga gcagagtgtg aagacagtcc ccggagccag cgatctttt tactggccaa ggagagccgg gaaactccag ggttcccacc acaagccctt gtccaagacg gccaatggac tggcggggca cgaagggtgg acaattgcac tcccgggccg ggcgtggcc cagaatggat ccttgggtga aggaatccat gacctggggg gtccccccg gggaaacagc acgaaccggc gtgtgagact gaagaacccc tctaccccg tgaccacgga gtccatagg gcctacggcg tcatgtgtct gcctgtgtg atcttcggga ccggcatcat tggcaacctg gggtgatgt gcactgtgtg ccacaactac tacatgcgga gcactccaa ctccctcttg gccaacctgg ccttctggga ctttctcatc atcttcttct gcttccgct ggtcatcttc cacgagctga ccaagaagt gctgctggag gacttctcct gcaagatcgt gccctatata gaggtcgctt cctggtggat caccacctc acctatgtg ctctgtgcat agaccgcttc cgtgctgcca ccaactaca gatgtactac gaaatgatcg aaaactgttc ctcaacaact gccaaacttg ctgttatatg ggtggagct ctattgttag cactccaga agttgttctc cgccagctga gcaaggagga tttggggttt agtggccgag agtgccaga aggtgcatt attaagatct ctcctgattt accagacacc atctatgttc tagccctcac ctacgacagt gcgagactgt ggtggtattt tggctgttac tttgtttgc ccacgctttt caccatcac tgctctctag tgactgcgag gaaatcgc aaagcagaga aagcctgtac ccgagggaa aaacggcaga tcaactaga gactcagatg aactgtacag tagtggcact gaccatttta tatggatttt gcattattcc tgaataatc tgcaacattg ttactgccta catggctaca ggggtttcac agcagacaat ggacctcctt aatatacatc gccagttcct tttgttcttt aagtcctgtg tcacccagt cctcctttc tgtctctgca aaccttcag tcgggcttc atggagtgct gctgctgttg ctgtgaggaa tgcattcaga agtcttcaac ggtgaccagt gatgacaatg acaacgagta caccacggaa ctcgaactct cgcctttcag taccatacgc cgtgaaatgt ccacttttgc tctgtcggga actcattgct ga</p>	Homo sapiens
357	6536	Putative Neurotransmi tter Receptor (PNR)	NM_003967	<p>atgagagctg tcttcatcca aggtgtgtaa gagcacccctg cggcattctg ctaccaggtg aatgggtctt gcccaggac agtacatact ctgggcatcc agttggteat ctacctgacc tgtgcagcag gcactgtgat tatcgtgcta gggaaatgtat ttgtggcatt tgctgtgtcc tacttcaaa cgtctcacac gcccaacaac tctcctgtgc tctcctggc cctggctgac atgtttcttg gtctgtgtgt gctgcccctc agcaccattc gctcagtga gagctgtgg ttcttcgggg acttctctct cgcgctgcac acctacctg acacctctt ctgcctcacc</p>	Homo sapiens

358	6536	Putative Neurotransmitter Receptor (PNR)	NP_003958.1	<p> tccatcttcc atctctgttt catttccatt gaccgccact gtgccatctg tgacccctg ctctatccct ccaagttcac agtgagggtg gctctcaggt acatctcggc aggatggggg gtgccgcag catacattc gttattctc tacacagatg tggtagagac aaggtcagc cagtggctgg aagagatgcc ttgttgggc agtgccagc tgctgtcaa taaatttgg ggctgggttaa acttccctt gttcttggc cctgcccac ttatgatcag cttgtatgtg aagatctttg tggttgctac cagacaggct cagcagatta ccacattgag caaagcctg gctgggctg ccaagcatga gagaaaagct gcaagaccc tgggcatgtg tgtgggcata tacctctgt gctggctgcc cttaccata gacacgatg tcgacagcct ccttcactt atcacacccc cactggtctt tgacatctt atctgggtt cttacttcaa ctgagcctgc aaccccatca tctatgtctt ttctaccag tggtttcgga aggcactgaa actcacactg agccagaagg tcttctacc gcagacagc actgttgatt tgtaccaaga atga MRVFIQGA EHPAFCYQV NGSCPRTVHT LIGQLVIYLT CAAGMLIIVL GNVFAFAVS P YFKALHTPTN FLILLSALAD MFLGLLVLP STIRSVESCW FFGDFLCRLH TYLDTLFLCLT SIFHLCFISI DRHCAICDPL LYPSEKFTVRV ALRYILAGWG VPAAYTSLFL YTDVWETRLS QWLEMPCVG SCQLLNKFW GWLNFPLFFV PCLIMISLYV KIFVATRQA QQITTLKSLS AGAAKHERKA AKTLGIVGI YLLCWLPTI DTMVDSLHF ITPPLVFDFI IWFAYFNSAC NPIIVFSYQ WFRKALKLTL SQKVFSPQTR TVDLQYE </p>	Homo sapiens
359	6777	G Protein- Coupled Receptor TM7SF1	NM_003272	<p> cggcgcatg cgcggagacc cccgcgggg cggcgggc cgtgagccc gatgagggc A gagcgtccc gccgcgcgg cagcgcccc gcccgatgg agacccgccc gtgggaccca gccgcaacg actcgtgcc gcccaagctg acccggccc gccccctta cgtgaagctt ggcctcacc tctgtctac cgtgttctac gcgtgctct cgtgttcat ctacgtgcag ctctggctgg tctggcgtta ccgccacaag cggctcagct accagagcgt cttcctctt ctctgctct tctggcctg cctcgggacc gtcctctct ccttctact caaagacttc gtggcgcca attcgctcag cccctctgct tctggctgc tctactgct cctgtgtgc ctgcagttt tcacctcac gctgatgaac ttgtacttca cgcaggtgat tttcaagcc aagtcaaat attctccaga attactcaa taccggttg ttaacctgt aaagacggga ttcatcagcc ttgttttct gttgtgtaaat ttaacctgt cgtgtcgtt aaagacggga aattgggaga ggaaggttat cgtctctgt cagatggcca ttaatgacac gctcttcgtg ctgtgtgccg tctctctct cactgtctc taaaaatct ctaagatgtc cttagccaac atttacttgg agtccaaagg ctcctccgtg tgtcaagtga ctgccatcg tgtcaccgtg atactgctt acacctctg ggcctgctac aacctgttca tctgtcatt ttctcagaac aagagcgtcc attccttga ttatgactgg tacaatgtat cagaccaggc agattgaag aatcagctgg gagatgctgg atactatta ttggagatgg tgttattgt ttgggaactc ttacctacca ccttagtctg ttatttcttc caggttagaa atctacaaa ggaacttacc aacctggaa tggccccag ccatggattc agtcccagat cttatttctt tgacaacct cgaagatatg acagtatga tgacctgccc tggaacattg cccctcaggg acttcaggga ggttttgctc cagattacta tgattgggga caacaaacta acagcttctt ggcacaagca ggaactttgc aagactcaac ttggatcct gacaaaccaa gccttgggta gcatcagta acagttttat ggacgattcc tcagatgaaa agcttcagaa aagcatagt acagctgaat tttagggca ctttctcta agaaatagaa cttgattttt attgttaca ggtttccaat ggcccatag gaataagcaa taatgtagac tgataaaccc ttattttagt actaaagag </p>	Homo sapiens

360	6777	G Protein- Coupled Receptor TM7SF1	NP_003263.1	gagccttgct atttcagtggt gtataattta aactttttta agaaaatctg tacttttata aagatgtatt ttgtataact taaataataa tgctaaagta tactagggtt tttttttctt gagaatggtta ctgcaatcat gttgtagttt gcacagactt ttatgcataa ttcaatttaa aaatatagaa tataatggtct taatagtttt taaagctttt ggactaaagt attccacaaa tcttacctct ttaggtcact gatgtcact cgaattctga gtgccacatt ggtagactcc taaaatacag ttgacaactt agccaattgc aactccagtg ttgataatta aatgaaatg gtaagcagc agactgtaag gtctttagag attttttttt aaggttccag ccgtaggttc ctcaaggaaat ctcttaagtt ttgcccagaag actggtactt cgtttcagta gggcgcta gtatacacat taatgataag ttgataacat taaaaatgta gctgacttat cctattaaac ctctctgct atgttcac	Homo sapiens
361	6853	Puriner- gic Receptor P2Y11	NM_002566	atggatcag gtgccaagtc ctgcccctg aacttcttg cagctgccga cgacaaactc A agtgggttcc aggggactt cctgtggccc atactggtg ttgagttcct ggtggccgtg gccagcaatg gcttgccct gtaccgctt agcatccga agcagcgc agcagcgc gccgtggtct tctctgtcca gctggcagtc agcagcctg tctgctctt gacgtgccc ccgtggccg cctacctta tcccccaag cactggcgt atggggaggc cgcgtgccg ctggagcgt tctcttccac ctgcaacctg ctgggcagcg tcatcttcat cactgcac agcctcaacc gctacctgg gctgctgac catcttctg cccgaagcca cctgcgacc aagcacgct gggccgtgg cgtgcggc gaagaggccg cgttctctg cgcctctgct ggcctgccc acactcagct tctccacct agagaggccg cagcaggggg cggcgaactg cagcgtggc aggcccgagg cctgcatcaa gtgtctggg acagcagacc aggggctggc ggcctacaga gcgtatagcc tgggtctggc ggggttggc tgcggcctgc cgtgctgct cagcgtggca gcctacggcg cctcggggc ggcctggcg ggcctgcta cgcagcccag gctgagagag ctgctgtgg cagcgttgg ggcagtggt gggccctct acgcagctc ctatgtgccc taccacatca tgcgggtgct caactggat gctcggcggc gctggagcac cgcctgccc agctttgcag acatagccca ggcacagca ggcctggagc tggggccta cgtgggtac caggtgatc ggggctcat gcccctggc tctgtgtcc acccttact ctacatggcc gcaagtccca gctgggtg ctgctgcga cactgcccc gctacagga cagctggaac ccagaggag ccaagagcac tggccaagc ctgcccctca atgccacagc cgcctctaaa ccgtcagagc cccagtcctc tgagctgagc caatga	Homo sapiens
362	6853	Puriner- gic Receptor P2Y11	NP_002557.1	MDRGAKSCPA NFLAAADKL SGFGDFLWP ILVVEFLVAV ASNGLALYRE SIRKQRPWHP P AVVFSVQLAV SDLLCALTLR PLAAALYPPK HWRYGEAAGR LERFLETCNL LGSVIFITCI SLNRYLGIVH PFFARSHLRP KHAWAVSAAG WVLAALLAMP TLFSLKRP QQGAGNCSVA RPEACIKCLG TADHGLAAYR AYSLVLAGLG CGLPLLLTLA AYGALGRAVL RSPGMTVAEK LRVAALVASG VALYASSYVP YHIMRVLNVD ARRWSTRCP SEADIAQATA ALELGPYVGY	Homo sapiens

363	6921	G Protein- Coupled Receptor GPR39	NM_001508	QVMRGLMPLA FCVHPLLLYMA AVPSLGCCCR HCPGYRDSWN PEDAKSTGQA LPLNATAAPK PSEPSRELS Q	Homo sapiens
				atggcttcac ccagcctccc gggcagtgac tgctcccaaa tcattgatca cagtcagtgc A cccaggtttg aggtggccac ctggataaaa atcacccctta ttctgggtga cctgatcatc ttctgatagg gcttctggg gaacagcgcc accattcggg tcaccagggt gctgcagaag aaaggatact tgcagaagg ggtgacagac cacatcgtga gtttggcttg ctggacatc ttggtgttcc tcacggcat gcccatggag ttctacagca tcatctggaa tccctgacc acgtccagct acaccctgtc ctgcaagctg cacactttcc tcttcgaggc ctgcagctac gtacagctgc tgcacgtgct gacactcagc tttagcgct acatcgccat ctgtcacccc ttcagggtaca agctgtgtc gggaccttg caggtgaagc tgctgattgg cttcgtctgg gtcacctccg ccctgggtgc actgcccctg ctgtttgcca tgggtactga gtacccccctg gtgaacgtgc ccagccaccg gggctcact tgcaaccgt ccagcacccg ccaccacgag cagcccgaga cctccaatat gtccatctgt accaacctct ccagccgctg gaccgtgttc cagtcacaga tcttcgggc cttcgtgtc taacctgtg tctgtcttc cgtagccttc atgtgctgga acatgatgca ggtgctcatg aaaagccaga agggctcgtt ggcggggggc acggggcctc cgcagctgag gaagtccgag agcgaagaga gcaggaccgc caggagcgag accatcatct tctgaggtc gattgtgtg acattggccg tatgtcggat gcccaaccag attcggagga tcatggctgc ggcacaccc aagcacgact ggacgaggtc ctacttcgg gcgtacatga tctctctccc cttctcggag acgtttttct acctcagctc ggtcatcaac ccgtcctgt acacgggtgc ctgcagcag tttcggcggg tgttcgtgca ggtcgtgtgc tgccgcctgt cgtgcagca cgcacaacc gagaaagcgc tgcgctaca tgcgcactcc accaccgaca ggcgcgctt tgtgcagcgc ccgtgtgctc tgcgctccc gcgccagtcc tctgcaagga gaactagaa gattttctta agcacttttc agagcgaggc cgagccccag tctaagtcct agtcattgag tctcagatca ctagagccca actcaggcgc gaaaccagcc aatctgctg cagagaatgg ttttcaggag catgaagttt ga KGYLQKEVTD HMVSLACSDI LVFLIGMPME FYSIINPLT TSSYTLSCKL HTFLFEACSY P ATLLHVLTL FERYAICHP FRYKAVSGPC QVKLLIGFVW VTSALVALPL LFAMGTEYPL VNVPSHRGLT CNRSSTRHHE QPETSNSMIC TNLSSRWTFV QSSIFGAFV YLVVLLSVAF MCWNMMQVLM KSQKGSLAGG TRPPQLRKSE SEESRTARRQ TIIFLRLIV TLAVCWMPNQ IRIMAAAKP KHDWTRSYFR AYMLLPFSE TFFYLSSVIN PLLYTVSSQ FRRVFVQVLC CRLSLQHANH EKRLRVHAHS TTDSARFQR PLLFASRRQS SARRTEKIFL STFQSEAEPP SKSQSLSLES LEPNSGAKPA NSAAENGQFQ HEV ggacaggtgc cccggagct tccgcctgc gaagaccag acggctgcag gagccgggc A agcctcggg tccagcgac catgaacgtc tcgggctgcc caggggccgg gaacgcgagc caggcggcg ggggggagg ctggcaccct gagcggtca tcgtgcccct gctcttcgag ctcatcttc tctggtggc cgtgggcaac acgtcgtgtc tggcggtgct gctgcgcggc ggccaggcgg tcagcactac caacctgtc atcctaac tggcggtggc cgacctgtg ttcatcctgt gctgcgtgc cttccaggcc accatctaca cctggagcg ctgggtgttc ggctcgtgc tgtgcaagg ggtgcacttc ctcatcttc tcaccatgca cggcagcagc ttcacgctgg ccgctgtct cctggacagg tatctggcca tccgtaccc gctgcactcc	
364	6921	G Protein- Coupled Receptor GPR39	NP_001499.1	atgtcgtgctg cagagaatgg ttttcaggag catgaagttt ga KGYLQKEVTD HMVSLACSDI LVFLIGMPME FYSIINPLT TSSYTLSCKL HTFLFEACSY P ATLLHVLTL FERYAICHP FRYKAVSGPC QVKLLIGFVW VTSALVALPL LFAMGTEYPL VNVPSHRGLT CNRSSTRHHE QPETSNSMIC TNLSSRWTFV QSSIFGAFV YLVVLLSVAF MCWNMMQVLM KSQKGSLAGG TRPPQLRKSE SEESRTARRQ TIIFLRLIV TLAVCWMPNQ IRIMAAAKP KHDWTRSYFR AYMLLPFSE TFFYLSSVIN PLLYTVSSQ FRRVFVQVLC CRLSLQHANH EKRLRVHAHS TTDSARFQR PLLFASRRQS SARRTEKIFL STFQSEAEPP SKSQSLSLES LEPNSGAKPA NSAAENGQFQ HEV ggacaggtgc cccggagct tccgcctgc gaagaccag acggctgcag gagccgggc A agcctcggg tccagcgac catgaacgtc tcgggctgcc caggggccgg gaacgcgagc caggcggcg ggggggagg ctggcaccct gagcggtca tcgtgcccct gctcttcgag ctcatcttc tctggtggc cgtgggcaac acgtcgtgtc tggcggtgct gctgcgcggc ggccaggcgg tcagcactac caacctgtc atcctaac tggcggtggc cgacctgtg ttcatcctgt gctgcgtgc cttccaggcc accatctaca cctggagcg ctgggtgttc ggctcgtgc tgtgcaagg ggtgcacttc ctcatcttc tcaccatgca cggcagcagc ttcacgctgg ccgctgtct cctggacagg tatctggcca tccgtaccc gctgcactcc	Homo sapiens
365	7221	Galanin Receptor GalR2	NM_003857	atgtcgtgctg cagagaatgg ttttcaggag catgaagttt ga KGYLQKEVTD HMVSLACSDI LVFLIGMPME FYSIINPLT TSSYTLSCKL HTFLFEACSY P ATLLHVLTL FERYAICHP FRYKAVSGPC QVKLLIGFVW VTSALVALPL LFAMGTEYPL VNVPSHRGLT CNRSSTRHHE QPETSNSMIC TNLSSRWTFV QSSIFGAFV YLVVLLSVAF MCWNMMQVLM KSQKGSLAGG TRPPQLRKSE SEESRTARRQ TIIFLRLIV TLAVCWMPNQ IRIMAAAKP KHDWTRSYFR AYMLLPFSE TFFYLSSVIN PLLYTVSSQ FRRVFVQVLC CRLSLQHANH EKRLRVHAHS TTDSARFQR PLLFASRRQS SARRTEKIFL STFQSEAEPP SKSQSLSLES LEPNSGAKPA NSAAENGQFQ HEV ggacaggtgc cccggagct tccgcctgc gaagaccag acggctgcag gagccgggc A agcctcggg tccagcgac catgaacgtc tcgggctgcc caggggccgg gaacgcgagc caggcggcg ggggggagg ctggcaccct gagcggtca tcgtgcccct gctcttcgag ctcatcttc tctggtggc cgtgggcaac acgtcgtgtc tggcggtgct gctgcgcggc ggccaggcgg tcagcactac caacctgtc atcctaac tggcggtggc cgacctgtg ttcatcctgt gctgcgtgc cttccaggcc accatctaca cctggagcg ctgggtgttc ggctcgtgc tgtgcaagg ggtgcacttc ctcatcttc tcaccatgca cggcagcagc ttcacgctgg ccgctgtct cctggacagg tatctggcca tccgtaccc gctgcactcc	Homo sapiens

366	7221	Galanin Receptor GalR2	NP_003848.1	<p> cgcgagctgc gcacgcctcg aaacgcgctg gcagccatcg ggctcatctg ggggctgtcg ctgtcttct cgggccccta cctgagctac taccgccagt cgcagctggc caacctgacc gtgtgccatc ccgctggag cgcctctgc cgcgcgccca tggacatctg cacttctgtc ttcagctacc tgcctctgt gctggttct ggctgacct ccgcgcgac cttgcgctac ctctggcgcg ccgtcgacc ggtggcgcg ggctcggtg ccgcgcgcg caagcgcaag gtgacagca tgatctcat cgtggcgcg cttcttctgc tctgctggt gcccaccac gcgtcatcc tctgctgtg gttcgccag ttcccgctca cgcgcgccac ttatcgctt cgcctctct cgcacctgtt ctcctacgac aactcctgc tcaaccccat cgtttacgcg ctggtctcca agcacttccg caaaggctc cgcacgatct gcgcggcct gctgggcccgt gcccaggcc gagcctcgg ccgtgtgtg cgtgcgcgc ggggaccca cagtggcagc gtgtggagc gcgagtcag cgcactgtt ccatgagcg aggcggcggt ggccttctgt ccttgcccc gcgttccca gccatgcac ctcgagcct gtcctggccc gtcctggcag ggcccaagg caggcgacg cctcctgac gttgatgtg cctgaaagca cttagcgggc gcgtgggat gtcacagat tggagtcatt gttgggggac cgtgggccc gctgtggat gtcacagat tggagtcatt gttgggggac cgtgggccc NM_001525 </p>	<p> LRGGQAVSTT P ASSFTLAASV NLTVCHPAWS KRVTRMILI VYALVSKHFR ALRPCPGASQ </p>	Homo sapiens
367	7246	Orexin Receptor 1	NM_001525	<p> cctccctca ggaagttga ggcctgagac cgaaaagacc tgggtgcaag cctccaggca A ccctgaagg agtgggctga ggcctggccc agctccctc ctcctctct gttagacct ggatgcccc ctgtgctcag ggcctcctgag ctcctgagc ctcagccac ccaggggccc cagatggggg tcccccttg cagcagagag ccgtcccttg tgcctccag cctatgaagat gagttctcc gctatctgt gcgtgattat ctgtacccaa aacagtatga gtgggtcctc atcgagcct atgtgctgt gtcgtctgt gccctggtg gcaaacgct ggtctgcctg gccgtgtggc ggaaccacca catgaggaca gtcaccaact acttcattgt caacctgtcc ctggctgacg ttctggtgac tgctatctgc ctgcgggcca gctgctggt ggacatcaact gagtcctggc tgttcggcca tgcctctgc aggtcatcc cctatctaca ggctgtgtcc gtgtcagtg cagtgtctac tctcagcttc cgcgccttg accgctggt tgcctctgc caccactat tgttcaagag cacagcccgg cgggcccctg gctccactct gggcatctgg gctgtgtcgc tggccatcat ggtgccccag tgcagctca tggaaatgcag cagtgtgtg cctgagctag ccaaccgcac aggcctcttc tcaagtctg atgaacgctg ggcagatgac ctctatccca agatctacca cagtgtcttc ttattgtca cctacctggc cccactgggc ctcatggcca tggcctattt ccagatatcc cgaaagctct ggggcccga gatccccggc accacctcag cactggtgag gaactggaag cgcctctcag accagctggg ggaacctggag cagggacctga gtggagagcc ccagccccgg ggcgcgcct tccctgctga agtgaagcag atgcgtgcac ggaggaaagac agccaagatg ctgatgtgtg tctgtgtgtt cttcgccctc tgctacctgc ccatcagcgt cctcaatgtc cttaaagagg tgttcgggat gttccgcca gccagtgacc gcgaagctgt ctacgcctgc ttcaccttct cccactggct ggtgtacgcc </p>	<p> VFALIFLVGT VHFLIFLTMH LSYYRQSQA VAAGSGARRA SYANSCVNPI DLHMSEAA DLHMSEAA DLHMSEAA </p>	Homo sapiens

368	7246	Orexin Receptor 1	NP_001516.1	MEPSATPGAQ MGVPDGSREP SPVPPDYDE FLRYLWRDYL YPKQYEWVLI AAYVAVFVVA P LVGNLTLCVLA VWRNHMRVTV TNYFIVNLISL ADVLVTALICL PASLLVDITE SWLFGHALCK VIPYLQAVSV SVAVLTLSEI ALDRWYAICH PLLFKSTARR ARGSIILGIWA VSLAIMVPOA AVMECSSVLP ELANRTRLFS VCDERWADDL YPKIYHSCFF IVTYLAPLGL MAMAYFQIFR KLWGRQIPGT TSALVRNWKR PSDQLGDLEQ GLSGEPQPRG RAFLAEVKQM RARRKTAKML MVLLVFALC YLPISVLNVL KRVFGMFRQA SDREAVYACF TFSHWLVYAN SAANPIIYNF LSGKFRQEQFK AAFSCCLPGL GPCGSLKAPS PRSSASHKSL SLQSRCSISK ISEHVVLTSV TTVLP	Homo sapiens
369	7247	Orexin Receptor 2	NM_001526	gggggggggg taattgagct tcagctgagc cggacgtagc ttctctctcc tgggtgcatt A gctgcagcct ccagtgccgg gtccttagtt cctcagctgc ctatctctcc ggtgcaacat cgctgtaaa gacagcaag ccaccgcaga agtgcccg cagaagactc cggaggcatt ggctcagtaa cttttcacgt cttttctgc tcgggagccc cttctagcct ctccgcgcag cctttccac cgcaaatcac cagtgcctcat ggggcagggc gagaggagct tgcagcattg agcggaaacc gacttgagcc cgtgatgtcc ggcaccaaat tggaggactc cccccctgt cgaaactggt catctgcttc ggagctgaat gaaactcaag agcccttttt aaacccacc gactatgac agagggaatt cctgcgttac ctgtggaggg aatacctgca ccgaaagaa tatgagtggg tccgtatcgc cgggtacatc atcgtgttctg tcgtggctct cattgggaa gtcctggttt gtgtggcagt gtggaagaac caccacatga ggacggtaac caactacttc atagtcaatc tttctctggc tgatgtgctc tgacccatca cctgccttcc agccacactg gtcgtggata tcaatgagac ctggtttttt ggacagtcctc ttgcaaaagt gattccttat ctacagaccg tgcggtgtc tgtgtctgtc ctacactga cgtgtatcgc cttgatcgg tggatatcaa tctgtcacc tttgatgttt aagagcacag caaagcgggc cgttaacagc attgtcatca tctggattgt ctctgcatt ataagtattc ctacggccat cgtcatggag tgcagcaccc ggttcccagg cttagccaat aaacccacc tctttacggt gtgtgatgag cgctgggggt gtgaaattta tcccaagatg taccacatct gtttctttct ggtgacatac atggcaccac tgtgtctcat atctgtagtt catctgcaa tttctgcaa actctggtgt cgacagatcc ctggaacatc atctgtagtt cagagaaaaa ggaagcccc gacgctgtt tcacagcctc gagggccagg acagccaacg aagtcggga tgagcgtgtt ggcggctgaa ataaagcaga tccgagccag aaggaaca gcccggatgt tgatgggtgt gcttttggta tttgcaattt gctatctacc aattagatc ctcaatgtgc taaagagagt atttgggatg tttgcccata ctgaagacag agagactgt tatgcctggt ttaccttttc aactggcctt gtatatgcca atagtgtgc gaatccaatt attataaatt ttctcagtgg aaaatttcga gaggaattta aagctgcgtt ttcttgctgt tgccttggag ttacccatcg ccaggaggat cggctcacca ggggacgaac tagcacagag agccggaaat ccttgaccac tcaaatcagc	Homo sapiens

Homo
sapiens

P

Orexin
Receptor 2

7247

370

aacttttgata acatatcaaa actttctgag caagttgtgc tcaatagcat aagcacactc
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gatacctgag taaaactatc ctttttaaaa tcaactggaa cagaaatttt attatcctat
gatgtgaagc taaaattact tgtggatctt tttttttttt aatctattgc tctttggaaa
taaaaaaaa gtcagtttaa aatgaaaaaa aaaaaaaa aaa
MSGTKLEDSP PCRNWSSASE LNETQEPFLN PTDYDDEEFL RYLWREYLHP KEYEWVLIAG
YIIVFWALI GNVLCVAVW KNHMRFTVN FYFIVDLSLAD RLVITITCLPA TLVVDITETW
FFGSLCKVI PYLQTVSVSV SVTLFSLIAL DRWYAICHPL MFKSTAKRAR NSIVIWIWV
CIIMIPQAI MECSTVFPGL ANKTTLETV C DERWGGEIYP KMYHICFFLV TYMAPLCLMV
LAYLIQIFRKL WCRQIPGTSS VVQRKWKPLQ PVSQPRGPQ PTKSRMSAVA AEIKQIRARR
KTARMLMWL LVFAICYLPI SILNVLKRVF GMEFHTEDRE TVYAWFTFESH WLWYANSAAN
PIIYNFLSGK FREEFKAAS CCCLGVHHRQ EDRLTRGRTS TESRKSILTQ ISNFDNISKL
SEQVVLTSIS TLPANGAGP LQNW

Homo
sapiens

A

Platelet-
Activating
Factor
Receptor

8436

371

NM_000952

ccagctgata ttccagccca cagaatgga gccacatgac tctctccaca tggactctga
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cagtagcccg aatgctccc gggccaccac ggatacggc actgaagtgg ttgtgccatt
caaccagatc cctggcaatt cctcaaaaa ttagtctctg cttc

Homo
sapiens

P

Platelet-
Activating
Factor
Receptor

8436

372

NP_000943.1

MEPHDSSHMD SEFRYTLFPI VYSIIFVLGV IANGYVLWVF ARLYPCKKFN EIKIFMNLTP
MADMLFLITL PLWIVYVQNG GNWILPKFLC NVAGCLFFIN TYCSVAFGLV ITYNRFQAVT
RPIKTAQANT RKRGISLSLV IWVAIVGAAS YFLILDSTNT VPDSAGSGNV TRCFEHEYKNG
SVPVLIHIF IVFSFLVFL IILFCNLVII RTLLMQPVQO QRNAEVKRRRA LMMVCTVLAV
FIICFVPHV VQLPWTIAEL GFQDSKFHQA INDAHQVTLIC LLSTNCVLDP VIYCFLTKEF
RKHLTEKFYS MRSSRKCSRA TTDVTVEVV PFNQIPGNLSL KN

Homo
sapiens

A

G Protein-
Coupled
Receptor
Ls8509

8509

373

NM_007223

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gtccacatta ttctctgtg ggacaagagc tgggcagttt tgaatgggtc ttgagggtggg

374 8509 G Protein- NP_009154.1 Homo sapiens
 Coupled
 Receptor
 Ls8509

taccocatgt gcactttctg aggatgcctc acttccctgg gctctgcaga gaacacacag
 agagaagact ttcagagctc acagagcag ggagcaggag cactctaagg gaattc
 MGHNGSWISP NASEPHNASG AEAAGVNRSA LGEFGEAQLY RQFTTVQVV IFIGSLIGNF P
 MVLWSTCRIT VKSVTNRFI KNLACSGICA SLVCPFDII LSTSPHCWW IYTMFLCKV
 KFLHKVFCVS TILSFPAL DRYSVLYPL ERKISDAKSR ELVMYWAHA VVASVPVFAV
 TNVADIYATS TCTEWSNSL GHLVYLVYN ITTVIVPVV VFLFLIR ALSASQKKV
 IIAALRTPQN TISIPYASQR EAEHLATLLS MMVFILCSV PYATLVVYQT VLNVPDTSVF
 LLLTAVWLPK VSLLANPVLV LTVNKSVRKC LIGTLVQLHH RYRRNVVST GSGMAEASLE
 PSIRSGSOLL EMFHIGQQOI FKPTEDDEES EAKYIGSADF QAKEIFSTCL EGEQGPQFAP
 SAPPLSTVDS VSQVAPAPV EPETFPDKYS LQFGFPFEL PPQWLSETRN SKRLLPPLG
 NTPLELIQTK VPKVGRVERK MSRNKVSIF PKVDS

375 8896 Neuropeptide NM_006173 Homo sapiens
 Y Receptor
 Type 6
 Pseudogene

ttgataggga tagaaacaca ttggctgctg tctatagtta acaagatgct gttacattcc A
 ttgcctcact agctctgaag actatactag cgggacaaaag aaagcacctg agatgagctg
 agaggagggt aaaggtacac agagatcccc tggatatattg ttctatgtcc tctcaggggc
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 tcaattttta gggctcgaag agcagctca agtcattcac atgtttccat caaatacaga
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 tcttacaatc ctgacacaaat ggaagtttcc ctaaaaccac cagcatctaa tacaaccagc
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 ctgccccgaa tatcttcaat gtcacttttg actggtatca tgaagtgctg atgagctgcc
 accacgacct ggtatttga gtttgccact tgggtgctat ggtttccaca tgtataaacc
 ctctctttta tggctttctc acaaaaaatt tccaaaagga cctggtagtg cttattcacc
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 tgcggaagct cttcttgaat gggagctgga caggtaattg tgggaatagg gcaagatgca
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 ctgctgtct catatgtcta tccaacacac cctccaacat acacgaacac acataccacc
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376	8896	Neuropeptide NP_006164.1 Y Receptor Type 6 Pseudogene	caaagaatga gaatgagaaa gcagagagag aggcacacag cagtcatggc tggggaacaa tggtcacaga tactttatt caatggaata tctacaaaag ttatgactaa tgatatgcct agtaaaaaa ctgctatacc tctctagcac tgaagaat fkqqrkaqnf ntstknns affyescqp pspallllci ayvvvlivgl fgnslslili P svsifslvt averyqlivn prgwkpsvth aywgttlwlf fslslsipff lsyhltdpf rnlslptdly thqvacvenw pskkdrllft tsfllyqyfv plgfilicyl kiviclrrrn akvdkkne grlnenkrin tmlisivtf gacwlpriess msltgimrc cattccccacc ctctctctt taataagcag gacgaaaaa gacaaattcc aaagaggatt A gttcagttca agggaatgaa gaattcagaa taatttttgt aaatggattc caatatcggg aataagaata agctgaacag ttgacctgct ttgaagaac atactgtcca ttgtctaaa ataatctata acaacaaaac caatcaaat gaattcaaca ttattttccc aggttgaaaa tgatttcagtc ctgcccctgg acctgatatt taccttagct ctctggctt ttgaaaaatga cattcttggt gtctctggaa acctggcctt gatcataatc atcttgaaac aaaaggagat gagaaatggt accaacatcc tgattgtgaa ccttccctc tcagacttgc ttgttgccat catgtgtctc coctttacat ttgtctacac attaatggac cactgggtct ttgttgaggc gatgtgtaag ttgaatcctt ttgtgcaatg tgttcaatc actgtgtcca tttctctct ggttctcatt gctgtggaac gacatcagct gataatcaac cctcgagggt ggagacaaa taatagacat gcttatgtag gtattgtgtg gatttgggtc cttgctgtgg cttctctctt gccttctctg atctaccaag taatgactga tgagccgttc caaatgttaa cacttgatgc gtacaaaagc aaatacgtgt gctttgatca atttccatcg gactctcata ggttgtctta taccactctc ctcttggtgc tgcagtattt ttgtccactt tgtttatat ttatttgcta cttcaagata tatatacgcc taaaaggag aaacaacatg atggacaaag tgagagacaa taagtacagg tccagtgaac ccaaaagaat caatatcatg ctgctctcca ttgtggtagc atttgagtc tctgggtcc ctcttaccat ctttaacact gtgtttgatt ggaatcatca gatcattgct acctgcaac acaatctgtt attcctgtc tgcacactca cagcaatgat atccactgt gtcaacccca tattttatgg gtctctgaa aaaaacttcc agagagactt gcagttcttc ttcaactttt gtgatttccg gtctcgggat gatgattatg aaacaatagc catgtccacg atgcacacag atgtttccaa aacttctttg aagcaagcaa gccagtcgc atttaaaaa atcaacaaca atgatgataa tgaaaaaatc tgaactact tatagcctat ggtcccgat gacatctgtt taaaaacaag cacaacttcg aacatacttt gattacctgt tctcccaagg aatggggttg aaatcatttg aaaaactga agattttctt gtcttgcttt ttactgcttt tgttgtagtt gtcataatta catttggaac aaaaaggtgtg gcttttggg tcttctggaa atagttttga ccagacatct ttgaagtgtc ttttgtgaat ttatgcatat aatataaaga cttttatct gtactattg gaatgaaatt tctttaaagt attacgatgc gctgacttca gaagtacctg ccatacaata cgttcattag atbgtgtcat cttgattaga ttagattaga ttagattgtc aacagattgg gccatccta ctttatgata ggcattcatt tagtgtgta caatagtaac agtatgcaaa agcagcattc aggagccgaa agatagtctt gaagtcattc agaaaggtgt tgagggttct gtttttggtt ggtttttgtt tgttttttt tttttcacc ttaaggaggg ctttcatttc ctccgactg attgtcactt aaatcaaat	Homo sapiens
377	9421	Neuropeptide nm_000909 Y Receptor Type 1	caatgagagag aggcacacag cagtcatggc tggggaacaa tggtcacaga tactttatt caatggaata tctacaaaag ttatgactaa tgatatgcct agtaaaaaa ctgctatacc tctctagcac tgaagaat fkqqrkaqnf ntstknns affyescqp pspallllci ayvvvlivgl fgnslslili P svsifslvt averyqlivn prgwkpsvth aywgttlwlf fslslsipff lsyhltdpf rnlslptdly thqvacvenw pskkdrllft tsfllyqyfv plgfilicyl kiviclrrrn akvdkkne grlnenkrin tmlisivtf gacwlpriess msltgimrc cattccccacc ctctctctt taataagcag gacgaaaaa gacaaattcc aaagaggatt A gttcagttca agggaatgaa gaattcagaa taatttttgt aaatggattc caatatcggg aataagaata agctgaacag ttgacctgct ttgaagaac atactgtcca ttgtctaaa ataatctata acaacaaaac caatcaaat gaattcaaca ttattttccc aggttgaaaa tgatttcagtc ctgcccctgg acctgatatt taccttagct ctctggctt ttgaaaaatga cattcttggt gtctctggaa acctggcctt gatcataatc atcttgaaac aaaaggagat gagaaatggt accaacatcc tgattgtgaa ccttccctc tcagacttgc ttgttgccat catgtgtctc coctttacat ttgtctacac attaatggac cactgggtct ttgttgaggc gatgtgtaag ttgaatcctt ttgtgcaatg tgttcaatc actgtgtcca tttctctct ggttctcatt gctgtggaac gacatcagct gataatcaac cctcgagggt ggagacaaa taatagacat gcttatgtag gtattgtgtg gatttgggtc cttgctgtgg cttctctctt gccttctctg atctaccaag taatgactga tgagccgttc caaatgttaa cacttgatgc gtacaaaagc aaatacgtgt gctttgatca atttccatcg gactctcata ggttgtctta taccactctc ctcttggtgc tgcagtattt ttgtccactt tgtttatat ttatttgcta cttcaagata tatatacgcc taaaaggag aaacaacatg atggacaaag tgagagacaa taagtacagg tccagtgaac ccaaaagaat caatatcatg ctgctctcca ttgtggtagc atttgagtc tctgggtcc ctcttaccat ctttaacact gtgtttgatt ggaatcatca gatcattgct acctgcaac acaatctgtt attcctgtc tgcacactca cagcaatgat atccactgt gtcaacccca tattttatgg gtctctgaa aaaaacttcc agagagactt gcagttcttc ttcaactttt gtgatttccg gtctcgggat gatgattatg aaacaatagc catgtccacg atgcacacag atgtttccaa aacttctttg aagcaagcaa gccagtcgc atttaaaaa atcaacaaca atgatgataa tgaaaaaatc tgaactact tatagcctat ggtcccgat gacatctgtt taaaaacaag cacaacttcg aacatacttt gattacctgt tctcccaagg aatggggttg aaatcatttg aaaaactga agattttctt gtcttgcttt ttactgcttt tgttgtagtt gtcataatta catttggaac aaaaaggtgtg gcttttggg tcttctggaa atagttttga ccagacatct ttgaagtgtc ttttgtgaat ttatgcatat aatataaaga cttttatct gtactattg gaatgaaatt tctttaaagt attacgatgc gctgacttca gaagtacctg ccatacaata cgttcattag atbgtgtcat cttgattaga ttagattaga ttagattgtc aacagattgg gccatccta ctttatgata ggcattcatt tagtgtgta caatagtaac agtatgcaaa agcagcattc aggagccgaa agatagtctt gaagtcattc agaaaggtgt tgagggttct gtttttggtt ggtttttgtt tgttttttt tttttcacc ttaaggaggg ctttcatttc ctccgactg attgtcactt aaatcaaat	Homo sapiens

378 9421 Neuropeptide NP_000900.1
 Y Receptor
 Type 1

Homo
 sapiens

ttaaaaatga ataaaaagac atactttctca gctgcaaaata ttatggagaa ttgggcaccc
 acaggaatga agagagaaag cagctcccca acttcaaaac ctttttgga cctgacaaca
 agagcatttt agagtaatta atttaataaa gtaaatagat attgctgcaa atagctaaat
 tatattttat tgaattgatg gtcaagagat ttccattttt ttttacagac tgttcagtgt
 ttgtcaagct tctggtctaa tatgtactgt aaagactttc cgtttacaat ttgtagaaac
 acaaatatcg ttttccatac agcagtgctt atatagtgac tgattttaac tttcaatgtc
 catctttcaa aggaagtaac accaaggtac aatgttaag gaattttac tttacctagc
 agggaaaaat acacaaaaac tgcagatact tcatatagcc ctttttaact tgtataaact
 gtgtgacttg tggcgctctta taaataatgc actgtaaga ttactgaata gttgtgtcat
 gttaatgtgc ctaattttcat gtatcttgta atcatgattg agcctcagaa tcaattggag
 aaactatatt ttaagaaca agacatactt caatgtatta tacagataaa gtattacatg
 tgtttgattt taaaaggcgc gacattttat taaaatcaat attgtttttg ctttttctga
 ggagtccttt tcagtttcat tttttctcat cccatgactt cctcccgatg gt
 MNSTLFSQVE NHSVHSNFSE KNAQLLAFEN DDCHLPLAMI FTLALAYGAV IILGVSGNLA P
 LIIILKQKE MRNVNIIIV NLSFSDLLVA IMCLPFTFVY TLMDHWFGE AMCKLNPFVQ
 CVSITVSIFS LVLI AVERHQ LIINPRGWRP NNRHAYVGIA VIWVLAVASS LPFLIYQVMT
 DEPFQNVTL D AYKDKYVCFD QFPDSHRLS YTTLLLVLYQY FGPLCFIFIC YFKIYIRLKR
 RNNMDKMRD NKYSRSETKR INIMLSIVV AFVAVCWLP LT IFNTVFDWNH QIATCNHNL
 LFLCHLTAM ISTCVNPIFY GFLNKNFQRD LQFFNFECDF RSRDDDDYETI AMSTMHTDVS
 KTSLKQASPV AFKKNND NEKI

379 9834 Corticotropin releasing factor
 Receptor 1

Homo
 sapiens

agccgagcga gcccgagat gggaggggcacc ccgcagctcc gtctcgtcaa ggcctttctc A
 cttctggggc tgaaccccg tctgcctcc ctccaggacc agcactgcga gagcctgtcc
 ctggccagca acatctcaga caatggctac cgggagtgcc tggccaaatgg cagctgggcc
 gccgcgtga attactcga gtgccaggag atcctcaatg agggagaaaa aagcaaggtg
 cactaccatg tcgcagtcac catcaactac ctgggccact gtatctccct ggtggccctc
 ctggtggcct ttgtcctctt tctgcggctc aggagcatcc ggtgcctgcg aaacatcatc
 cactggaaac tcatctccgc ctccatcctg cgcaacgccca cctgggttcgt ggtccagcta
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 tacaactact tccatgtgac caactcttc tggatgttcg gcgagggctg ctactgcac
 acagccatcg tgctcaccta ctccactgac cggctgcga aatggatgtt catctgcatt
 ggtgggggtg tgcccttccc catcattgtg gcctgggcca ttgggaagct gtactacgac
 aatgagaagt gctgggttgg caaaaggcct ggggtgtaca cggactacat ctaccagggc
 ccatgatcc tggctcctgt gatcaatttc atctctctt tcaacatcgt ccgcatcctc
 atgaccaagc tccgggcgc caccagctct gagaccattc agtacaggaa ggtctgtgaaa
 gccactctgg tgctgctgccc cctcctgggc atcacctaca tctgtttctt cgtcaatccc
 ggggaggatg aggtctcccg ggtcgtcttc atctactca agctcttctt ggaatccttc
 cagggcttct ttgtgtctgt gttctactgt ttctcaata gtgaggtccg ttctgccatc
 cggaaagagt ggcaccggtg gcaggacaaag cactcgatcc gtgcccagat ggcctgtgcc
 atgtccatcc ccacctcccc aaccctgtgc agctttcaca gcatcaagca gtccacagca
 gtctga

380	9834	Corticotropin releasing factor Receptor 1	NP_004373.1	MGHPQLRLV KALLLLGLNP VSASLQDQHC ESLSLASNIS DNGYRECLAN GSWAARVNYS P	Homo sapiens
				ECQELINEEK KSKVHYHVAV IINYLGHCI S IVALLVAFVL FLRLRSIRCL RNIIHWNLLIS	
				AFILRNATWF VVQLTMSPEV HQSNVGVCR L VTAAYNYFHV TNFFWMFEGE CYLHTAIVLT	
				YSTDLRKWM FICIDGWVPE PIIVAWAIGK LYDNEKCFW GKRPGVYTDY IYQGPMLVL	
				LINFIFLNI VRILMTKLRA STTSETIQYR KAVKATLVLL PLLGITVMLF FVNPGEDEV S	
				RVFIYFNSF LESFQGFVVS VFYCFINSEV RSAIRKRWRH WQDKHSIRAR VARAMSIP TS	
				PTRVSFHSIK QSTAV	
381	10457	Frizzled-2	NM_001466	cgagtaaaagt ttgcaaaag ggcggggagg cggcagccgc agcgaggagg cggcggggaa A	Homo sapiens
				gaagcgcaagt ctccgggttg gggcgggggg cggggggggg gccaaaggag cgggtggggg	
				gcggcgggcca gcatgcggcc ccgacggccc ctgccccggc tgcgtgctgc gctgctgctg	
				ctgccccggc cggggccggc ccagtccac ggggagaaag gcatctccat cccggaccac	
				ggctctgccc agcccatctc catcccgctg tgcacggaca tgcctacaa ccagaccatc	
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				tatccgctgg tgaagtgca gtgctgccc gaactgcgt tcttctgtg ctccatgtac	
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				gagacggag ctccgcgct actcaccac gcgcgcgcgc cgggactgca gccgggtgccc	
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				caccccttc actgcgcgc gctcctcaa gtgccatct atctcagta caagtctctg	
				ggcagcgctg attgtgctg gccctgcgaa cctgcgcgc ccgatggttc catgttcttc	
				tcacaggagg agacgcgttt cgcgcgcctc tggatcctca cctggtcggt gctgtgctgc	
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				gagcggccta tcatcttct gtcgggctgc tacaccatgg tgcggtggc ctacatcgcc	
				ggcttcgtgc tccaggagcg cgtggtgtgc aacgagcgct tctccgagga cggttaccgc	
				acggtggtgc agggcaccaa gaaggagggc tgaccatcc tcttcatgat gctctacttc	
				ttcagcatgg ccagctccat ctggtgggtc atcctgtgc tcacctggt cctggcagcc	
				ggcatgaagt ggggccaca ggcctcag gccaactctc agtactcca cctggccgcc	
				tggcccgctg cggccgtcaa gaccatcac atctggcca tgggccagat cgaaggcgac	
				ctgctgagcg gctgtgctt cgtaggcctc aacagcctgg accgctgc gggcttcgtg	
				ctagcgccgc tcttctgta cctgttcac ggcacgtct tctcctggc cggcttcgtg	
				tcgctcttc gcatccgcac catcatgaag cagcagcgca ccaagaccga aaagctggag	
				cggctcatgg tgcgcatcg cgtcttctc gtgcttaca cagtgcgcc caccatgctc	
				atcgcttgct acttctacga gcaggcctc cgcgacact gggagcgtc gtgggtgagc	
				cagcactgca agagcctggc catcccgctg ccggcgcat acagcccgcc catgtcgccc	
				gacttcacgg tctacatgat caaatacctc atgacgtca tcgtgggcat cagctcgggc	
				ttctggatct ggtcgggcaa gacgtgcac tcgtggagg agttctacac tcgctcacc	
				aacagccgac acggtgagac caccgtgtga gggacgcccc caggccggaa ccgctcgccg	
				cttctctccg cccggggtgg ggcctctaca gactccgtat tttattttt taaataaaaa	
				acgatcgaaa ccatttact tttagggttc ttttataaag agaactctct gcccaacacc	
				ccc	

382	10457	Frizzled-2	NP_001457.1	MRPRSALPRL LGHTNQEDAG CEALMNKFGF GGPGGGGAPP TRFARLWILT QERVVCNERF GHEAIEANSQ FYFLIGTSF FYEQAFAREHW SGKTLHSWRK	LLPLLLLPAA LEVHQFYPLV QWPERLRCEH RYATLEHPFH WSVLCCASTF SEDGYRTVVQ YFHAAWAVP LLAGFVSLFR ERSWVSQHCK FYTRLNSRH	GPAQFHGEKG KVQCSPELRF FPRHGAEQIC CPRVLKVPYS FTVTYLVDM GTRKKEGCTIL AVKTITILAM IRTIMKHDGT SLAIPCPAHY GETTV	ISIPDHGFCQ FLCSMYAPVC VQONHSEDGA LSYKFLGERD QRFYRPERPI FMWLYFFSMA QOIDGDLISG VCFVGLNSLD RIGVFSVLYT YMIKYLMTLI	PISIPLCTDI TVLEQAIPPC PALLTTAPP CAAPCEPARP IFLSGCTVMV SSIWVILSL TWFLAAGMKW PLRGFVLAPL VPATIVIACY VGITSGFWIW	Homo sapiens	
383	11968	Putative Leukocyte Platelet- Activating Factor Receptor (HUMNPIIY20)	NM_022571	atggccttac acttccctcag gggaacctga ggcggttccg ggcggtccgc atcttccctgc cagctccgca ggcgtgctct cctgcgctgc tgcttcggca cgtcggccgc ggcggtgacg ggcggtggcc tgcttctgcc gtgaacacct tcacatcatga	tgggcagcca cgccacagc gcgacgcaag ggcagcgcg tgctgtcgca tgtctagcct ccgtcaccaa gcttgcctgc cctgcgctgc tcgtgtacgc cgcgggagaa ccttgggctt agagcttcca actaccacat acgcgcgcgt	gcactccggc ggcctgtctc cgagggcgcc ggagcgggg cgagctgca tggcaactgc cgcttccatc gccttccctg ctggcgggcc tcagcgtggc gatcggccgc cctcttgccc cggctgcctc gctgggtggg ctgaacagac gctgcgttct	ggccctccg tccttcagca acagctgcg ggcggtgga gtggcgccc gcggtgatgg ctgtcgctgt ccctatcgga ctccgcccgc ttctgcggc ttctgcggc gctcatctcg cgccgcgcgc tgggagctgc taccggacct gctgctacc gtgcgcctgt cggaacgtgc ggcgcagctg	acctggcggg cgcgcgctg cgcggcgctt aggcggcctt aggcggcggg gggtgatgtg tctgctcacg tctgctcacg gggttcggcg cttcagctcg tgggacctt tgcagctgct tcggggcgcc ccccggacct tgcgtccctt cctgctcatc cggaacgtgc ggcgcagctg accaccgtcc	A	
384	11968	Putative Leukocyte Platelet- Activating Factor Receptor (HUMNPIIY20)	NP_072093.1	MALLGSQHS GGSGAAREAG QLRTVTNAFI CFGIVYAQRG AAGQSFHGCL VNTYARVLRS	APSAAGPPGG AAVRRPLGPE LSLSLDLLT AHLVGPLLRY YRTSPDPAQL SARCARRPPS	TSSAATAAVL AAPLLSHGAA ALLCLPAAFL RRPPREKIGR GGPFSVGLV SS	SFSTVATAAL VAAQALVLL DLFTPPGSA RRALQLLAGA ACYLLPFLI CFCHYHICKT	GNLSDASGGG IFLLSSLGNC PALPAGPWRG WLTALGFSLP VRLSDVRVRP	TAAAPGGGGL AVMGVIVKHR FCRPSRFFSS WELLGAPREL	Homo sapiens
385	14198	Interleukin-8 Receptor B	nm_001557	cattcagaga aagccatcag acctgtcctg caggagggca gtttcatctt aagacatcgg cagggtgaaa	cagaaggtgg acaggaagat ggccaaagtc tcctggattt tttttctctg tggccactcc gcccagcgac	atagacaaat gtgaaaatcc ccaggacaga cccccttgca tctaacagct aataacagca ccagtcagga	ctccaccttc ccagcactca cctcatgtgt accagggtca ctgactacca ggtcacagct ttaaagtta	agactggtag tcccagaatc cctctgtggg gaagtctcat cccaaccttg gctcttctgg cctcaaaaat	gctcctccag actaagtggc aatacctccc cgtcaaggtt aggcacagtg agggtgtccta ggaagatttt	Homo sapiens

aacatggaga gtgacagctt tgaagatttc tggaaagggtg aagatcttag taattacagt
tacagtctta cctgcccc tttctacta gatgccgcc catgtgaacc agaaccctg
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cagaagcacc gggccatgct ggtcatcttt gctgtcgtcc tcacttctt gctctgctgg
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attaaaccaa ggctagaacc acctgcctat atttttgggt aaatgatttc attcaatc
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386	14198	Interleukin- 8 Receptor B	NP_001548.1	MEDFNMESDS LSLLGNLSVM VVSLLKEVNF LLFRRTVYSS AHMGQKHRAM ILGILHSCLN	FEDFWKGEDL LVILYSRVGR YSGILLIACI NVSPACYEDM RVIFAVWLIF PLIYAFIGQK	SNYSYSSTLP SVTDVYLLNL SVDRYLAIHV GNNTANWRML LLCWLFPYNLV FRHGLLKILA	PFLDDAAPCE ALADLLFALT ATRTLTQKRY LRILPQSFGE LLADTLMRTQ IHGLISKDSL	PESLEINKYF LPIWAASKVN LVKFICLSIW IVPLLIMLFC VIQETCERN PKDSRPSFVG	VVIIVALVEL GWIFGTFCK GLSLLALPV YGFILRTLFK HIDRALDATE SSSGHTSTTL	Homo sapiens
387	14641	Calcitonin Receptor	NM_001742	MEFNMESDS LSLLGNLSVM VVSLLKEVNF LLFRRTVYSS AHMGQKHRAM ILGILHSCLN	FEDFWKGEDL LVILYSRVGR YSGILLIACI NVSPACYEDM RVIFAVWLIF PLIYAFIGQK	SNYSYSSTLP SVTDVYLLNL SVDRYLAIHV GNNTANWRML LLCWLFPYNLV FRHGLLKILA	PFLDDAAPCE ALADLLFALT ATRTLTQKRY LRILPQSFGE LLADTLMRTQ IHGLISKDSL	PESLEINKYF LPIWAASKVN LVKFICLSIW IVPLLIMLFC VIQETCERN PKDSRPSFVG	VVIIVALVEL GWIFGTFCK GLSLLALPV YGFILRTLFK HIDRALDATE SSSGHTSTTL	Homo sapiens

388	14641	Calcitonin Receptor	NP_001733.1	<p> aaacattaca tgctcagctt gggtttggac aagcctgtcc attgggcagg acctagctgt tgtaagaat tggctttaat gttgaatgta ttttggttgc tgaatgttat aaactgagag gtcacaaaga atctatcact aaaaattttt acaaaactgc caaaaatata attcttagtg gaagacaata ctccctttta agagagtttg ccactccctt aaactccagg attataaag caaattactc caagggttat aaagcagatt acctcttgc ctgggtgtgt atctagcagt aaaagataaa tttgttgaat attggttaatt aaaagactcc acataagtcc attaactgct ttccaccag cttcaaaagct taaaaagagc tcaggctttt ccaggaagat ccaggagggc taattagaaa tcaactgtg gttgaccgt ttttcttctg tattaccaaa caggaggga aaaaattaac tgcctcaaat ttaaccataa atcaattcat gtttaacgtt tctcataaa atccagtatt atattatcat atctctcttt acttccagat ataagatttt tgaataatcct gaataaacca gtatcggttac tggcacctga aattaatttg tgaatttga acagtaataca gagttaccat tatttaattt gtatgctaaa tgaggaggtta cattgaaacc ctccaaatct ccagtctcat ctatgtcata ttttgccact gccttcaga agtgatttag ttgtggaaag ataataaatt gatttggtat ggttacatat ttagcgacc cagagaaaat taattatatt tctacagaga aaatgaattt gggatactaa agtagtttaa gtctccttta ctgaatgtaa gggggggac gaaaagaagg tatttttcca atcacagtg tatgtagat tgttctattt ttgtttaca acatggaaa cagagtattt ctggcagctg tggtaacaaat gtgataatat attgctaaaa tatttagat gttattatgc taatatagta ggggttgaag aaaaacaaat agcttattat agaattgcac atagttctgc ccaaattatg tgaatgctt atgcttgtgt atatgtataa attaatcacag agtacgttaa aagcaaaaaa agtatattt gcatattttt ctaaagaaat atattattca tcttttcatt c </p>	Homo sapiens
389	16041	C-C Chemokine Receptor 6	NM_004367	<p> QLPAYQGEHP YCNRTWDGWL CWDDTPAGVL SYQFCPDYFP DFDSEKVTK YCDEKGVWFK HPENRTWSN YTMCAFTPE KLNAYVLYY LAIVGSLSI FTLVLSLGF VFRSLGCQR VTLKNNFLT YILNSMIII HLVEVPNGE LVRRDPVSK ILHFFHQYMM ACNYFWMCE GIYLTLLIV AVTEKQRLR WYLLGWGFP LVPTTIHAI RAVYFNDNCW LSVETHLLYI IHGPVMAALV VNFLLNIV RVLVTMRET HEAESHMYLK AVKATMILVP LLGQFVFP WRPSNKMGLK IYDYVMHSLI HFQGFVATI YCFNNEVQT TVKRWQAQFK IQWNQRWGR PSNRSARAA AAAEAGDIPI YICHQELRNE PANNQGEESA EIIPNLIEQ ESSA caaacgttcc caaatcttcc cagtcggctt gcagagactc ctgtctcca ggagataacc A agaagctgca tcttattgac agatggtcat cacattgggt agctggagtc atcagattgt ggggcccgga gtgaggtcga agggagtga ctagagcact gcctgagagt cacctctact ttcctgtac cgtgctgt gtgctgag gggtgaacca tacactcctt tttctacaac cagcttgcat ttttctgcc caaatgagc ggggaatcac tgaatttcag cgaattttc gactccagt aagattattt tgtgtcagc aatacttcat attactcagt tgattctgag atgttactgt gctccttgca ggaggtcagg cagttctcca ggctatttgt accgattgcc tactccttga tctgtgctt tggcctcctg gggaatattc tgggtgtgat caccttctg ttttataaga aggcaggtc tatgacagac gtctatctct tgaacatggc cattgcagac atcctctttg tttctactct cccattctgg gcagtgtgac atgccactgg tgcgtgggtt ttcagcaatg ccacgtgcaa gttgctaaaa ggcattctatg ccatcaactt taactgcggg atgctgctcc tgacttgcat tagcatggac cggtagatag ccatgtaca ggcgactaag </p>	Homo sapiens

tcattccggc tccgatccag aacactaccg cgacacgaaa tcatctgcct tgttgtgtgg
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aactcatgtt tttaaaggcc tatgtaataa tatgaacatt agaaaaatag caacttgtgt
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aaaaaaaaa aggaagaac tgtcatgtaa acataccgac atgtttaaac ctgacaatgg
tgttatttga aacttatat tgttcttga agctttaact atatctctct ttaaaatgca
aaataatgtc ttaagattca agtctgtat ttttaagca tggcctttggc tttgcaaat

390	16041	C-C Chemokine Receptor 6	NP_004358.1	<p> aaaaaatgtg tttgtacat gaagtaggaa tcgtatttca gcttcaaggt tcagattgag gggccactg ttggagagg atggtattca ggctttctca tgcttctcaa atctgttagc gttgactct agaaatcaa gcaaggagt ggttaccag aacttcttt tgggtgtgac aatgcgtga tgtgactat gaagatgatt ctctgcataa tttaaatgtt cagataaaatg gcttatttgc caaagctggg agatgagctt ctctgcataa tttaaatgtt cagataaaatg aagctgactt atttaagcaa taacctttta aacattttag ctaagatgta taaaaatgtt tcaaaaatat accacatac ttatttcttc ttaaatgtag tacattaggt tacatcattt ttcttgctgt cttgggcac aaaaaggtg ccatggtaac ctgacactct caggagacat taagatagaa ggggctgttc tcagtggtt cccattgatt ctcctcatac ctttttgctc tcaggctctg gccgtctctt cctgagcctt aactgtgt MSGESMNFSD VFDSSDYFV SVNTSYYSVD SEMLLCSLQE VRQFSRLFPV IAYSLICVFG P LLGNILVVIT FAFYKKARSM TDVYLLNMAI ADILFVLTLF FWAIVSHATGA WVFNSNATCKL LKGIYAINFN CGMLLTCTIS MDYIAIVQA TKSFRLRSRT LPRTKIICLV VMGLSVIISS STEVFNQKYN TQGSVDCEPK YQTVSEPIRW KLMLGLELL FGFFIPLMFV IFCYTFIVKT LVQAQNSKRH KAIRVIAV LVFLACQIPH NMVLLVTAAN LGMNRSQCS EKLLGYTKTV TEVLAFLHCC LNPVLYAFIG QKFRNYFLKI LKDLWCVRK YKSSGFSCAG RYSENISRQT SETADNDNAS SFTM </p>	Homo sapiens
391	16599	Smoothened	NM_005631	<p> atggccgctg ccgcccagc gcggggggccc gagctcccgc tctggggct gctgctgctg A ctgctgctgg gggacccggc cggggggggcg gcctcgagcg ggaacgcgac cgggcctggg cctcggagcg cgggcgggag cgcgaggag agcgcgcgcg tgaactggcc tccgcgccc ctgagccact gcggcgggccc tgcccctgc gacccgctgc gctacaaagt gtgcctgggc tcgggtgctg cctacgggccc cactccaca ctgctggcgg gagactcggc cctccaggag gaagcgacg gcaagctcgt gctctggctg ggcctccgga atgcccccg ctgctgggca gtgatccagc cctgctgtg tgccgtatag atgccccag gtgagaaatga ccgggtggag ctgcccagcc gtaccctctg ccaggccacc caggccccct gtgacctcgt ggagagggag cggggctggc ctgacttctt gcgctgcact cctgaccgct tccctgaagg ctgcacgaat gagggtcaga acatcaagtt caacagttca ggccagtgcg aagtgcctt ggttcggaca gaaaacccca agagctgcta cgaggacgtg gagggtgcg gcatcagtg ccagaacccg ctcttcacag aggtgagca ccaggacatg cacagctaca tgcggcctt cggggccgctc acgggcctct gcacgctctt caccctggcc acattcgtg ctgactggcg gaactcgaat cgctaccctg ctgttattct ctctacgtc aatgcgtgct tcttggggg cagcattggc tggctggccc agttcatgga tgggtggccc cgagagatcg tctgcctgc agatggcacc atgaggcttg gggagccac ctccaatgag agtctgtcct gctcactcat ctttgtcatc gtgtactacg cctgtggc cctgtgtggt tgggtgtggt tggtttggg tctcacta tgcctggcac acttccctca aagccctggg caccacctac cagcctctct cgggcaagac ctctacttc cactgctca cctggtcact cccctttgtc ctactgtgg caatcctgc tgtggcgag gtggatgggg actctgtgag tggcatttgt ttgtgggct acaagaacta ccgataccgt gcgggcttcg tgcctggccc aatcgccctg gtgtcatcg tggaggcta cttcctcatc cgaggagtca tgactctgt ctccatcaag agcaaccacc ccgggctgct gagtgaagag gctgccagca agatcaacga gaccatgctg cgcctgggca tttttggctt cctggcctt ggctttgtg tcattacctt cagctgccac ttctaacca ggctgagtgg </p>	Homo sapiens

[illegible]

393	17250	G Protein- Coupled Receptor GPR45	NM_007227	AGDSCRQGAW TLVSNPFCPE PSPQDPFLP SAPAPVAWAH GRRQGLGPIH SRTNLMDEL MDADSDF	atggcctgca acagcacgtc ccttgaggct tacacatacc tgctgctgaa caccagcaac A gctcagact cggggtccac ccagttgccc gcacccctca ggatctcctt ggccatagtg atgctgctga tgacctggt ggggttctctg ggcaacactg tggctgtcat catcgtgtac cagaggccgg ctatgcgtc ggccatcaac ctgctgctg ccacctggc cttctccgac atcatgctgt cctctgctg catgcccttc accgccgtca cctcatcac cgtgcgctgg cactttgggg accacttctg ccgcctctca gccagctct actggttttt tgcctggag ggcgtggcca tccgtctcat catcagcgtg gaccgtcttc tcacatcgt ccagcgcag gacaagtga accgcgcag ggccaagtg atcatgcgg tctcctgggt gctgtccttc tgcatcgcgg ggccctcgt cacgggctgg acgtggtgg agtgccggc gcgggcccc cagtgcgtgc tgggctacac ggagctccc gctgaccgcg catacgtggt cactttggtg gtggccgtgt tcttcgcgc ctttggcgtc atgctgtgcg cctacatgtg catcctcaac acgggtccga agaaccgct gcgctgcac aaccagtcgg acagcctgga cctgcggcag ctcaccagg cgggcctgc gcctgcag cggcagcaac aggtcagcgt ggacttgagc ttcaagacca aggccttcac caccatcctg atcctcttc tgggtcttc cctctgctg ctgccccact ccgtctacag cctcctgtct gtgttagcc agcgtttta ctgcggttc tcttctacg ccaccagcac ctgcgtcctg tggttcagtt accctcaagtc cgtcttcaac cccatcgtct actgctggag aatcaaaaaa tccgcgagg cctgcataga gttgctgccc cagaccttc aaatcctcc caagtgcct gacgggatcc gaaggagaat ccagccaagc acagtatacg tgtgcaatga aaacagctc gcggttag	Homo sapiens
394	17250	G Protein- Coupled Receptor GPR45	NP_009158.1	MACNSTSLEA YTYLLNTSN ASDSGTQLP APLRISLAIV MLLMTVVGFL GNTVVCIIIVY P QRPAMRSAIN LLLATLAFSD IMLSLCCMPE TAVTLITVRW HFGDHFCLRS ATLYWFFVLE GVAILLIISV DRFLIIVQRQ DKLNPRAKV IIAVSWVLSF CIAGPSLTGW TLVEVPARAP QCVLGYTELP ADRAVVVTLV VAVFFAPEGV MLCAYMCILN TVRKNVAVRH NQSDSLDLRQ LTRAGLRRLQ RQQQSVVDLS FKTKAFTIL ILFVGFSLCW LPHSVYSLLS VFSQRFYCGS SFYATSTCVL WFSYLSKSVEN PIVYCWRIKK FREACIELLP QTFQILPKVP ERIRRIQPS TVVVCNENQS AV	Homo sapiens	
395	17345	G Protein- Coupled Receptor D6	NM_001296	ggtcttatga cctgctattg aacacggcag agcctgttgg tgacctgcac acaggagccc A tccagtcagt actgattgaa ttactcaagg ctgcctctct gcaaaagtga gcactacagg acgtcgggac tgggcatttc ctccaacat ggcgcacct gctctccgc agccactcgc cactgaggat gccgattctg agaatagcag cttctattac tatgactacc tggatgaagt ggccttcagt ctctgcagga aggatgcagt ggtgtccttt ggcaaaagtct tctctccagt cttctatagc ctgatttttg tgtgggcct cagcgggaa cctcctcttc tcatggctct gtcccgttac gtgcctcgca ggcgatggt tgagatctat ctgctgaatc tggccatctc caaccttctg tttctggtga cactgccctt tccgtggcatc tccgtggcct ggcattgggt cttcgggagt tctctgtgca agatggtgag cactctttat actattaact tttacagtgg catctttttc attagctgca tgagcctgga caagtacctg gagatcgttc atgctcagcc ctaccacagg ctgaggaccc ggccaagag cctgctcctt gctaccatag tatgggctgt gtccctggcc gtctccatcc ctgatattgt ctttgtacag acacatgaaa atcccaagg tgtgtggaac tgccacgacg atttcggcgg gcatgggacc atttgggaagc tctctccg	Homo sapiens	

396	17345	G Protein- Coupled Receptor D6	NP_001287.2	cttccagcag aacctcctag gggtttctcct tccactcctt gccatgatct tcttctactc ccgtattggt tgtgtcttgg tgaggtctgag gccgcaggg caggcccggt ctttaaaaaat agctgcagcc ttgtgtgtgg ccttcttcgt gctatggttc ccatacaatc tcaccttggt tctgcatacg ctgttgacc tgcaagtatt cgggaactgt gagtcagcc agcatctaga ctacgcactc caggtaacag agagcatcgc ctctcttcac tggctgtttt cccccatcct gtatgccttc tccagtcacc gcttcgcga gtacctgaag gctttcctgg ctgccgtgct tggatggcac ctggcacctg gcactgcca ggcctcata tccagctgtt ctgagagcag catacttact gcccaagagg aatgactgg catgaatgac ctggagaga ggcagctga gaactacctt aacaaggagg atgtgggaa taaatcagcc tgaagtacca aattttggtc tgggtgggaa agatgggaa cagctcaatt ggggtgtccac tcaaatgtct c LSGNLLLLMV LTRYVPRRM VEIYLLNLAI SNLLFLVTLF FWGISVAWHW VFGSFLCKMV STLYTINFY GIFFISMSL DKYLEIVHAQ PYHRLRTRAK SLLLATIWWA VSLAVSIPDM VFVQTHENPK GVMNCHADFG GHGTIWKLF RLQQLRTRAK LPLLAMIFFY SRIGCVLVR RPAGQGRALK IAAALVVAFF VIMFPYNLTL FLHTLLDLQV FGNCEVSQHL DYALQVTE AFLHCCFSP ILYAFSSHRFR QYLKAFLLAV LGWHLAPGTA QASLSSES SILTAQEEMT GMNDLGERQS ENYPNKEDVG NKSA	Homo sapiens
397	17535	Gaba (b) Receptor 1	NM_001470	cgctccccgc tcccgtggtt gccgcgcgc cggggaagaa gagacagggg tgggggttgg A gggaagcgag agaggagggg agagaccctg gccaggtctg agcctggatt cgaggggagg aggacgga ggagagaaa ggtggagag aaggagggg ggagcgggga ggagcggcgg ggcctggggc cttagggccc ggggagagcc gggagcgcgc cgagatgttg ctgctgctgt tactggccc actcttctc cgcgcgcgc ggcgggggcg ggcgagacc cccaacgcca cctcagaagg ttgccagatc atacaccgc cctgggaagg ggccatcagg taccggggcc tgactcggga ccaggtgaag gctatcaact tccgtccagt ggactatgag attgagtatg tgtgccgggg ggagcgcgag gtggtggggc ccaaggtccg caagtgcctg gccaacggct cctggacaga tatggacaca cccagccgct gtgtccgaat ctgctccaa tcttatttga ccttggaata cgggtgtgac cccgacttcc atctggtggg cagctcccg gacggagccc ggggtgattt cgggtgtgac cccagccccc actgcccagg gaatcgaacg agcatctgta gtcagggcca gtggagcacc ggggcaactgt tcccatgag cgggggctgg ccacactcag aacggcgcgc agtgtacatc ggggcaactgt tcccatgag cgggggctgg ccagggggc agcctgcca gcccgcggtg gagatggcgc tggagagcgt gaatagcgc aggacatcc tgcggacta tgagctcaag ctcatccacc acgacagcaa gtgtgacca ggccaagcca ccaagtacct atatgagctg ctctacaacg accctatcaa gatcatcctt atgcctggct gcagctctgt ctccacgctg gtggctgagg ctgctaggat gtggaacctc attgtgcttt cctatggctc cagctacca gccctgtcaa accggcagcg ttccccact ttcttccgaa cgcaccatc agccacatc cacaacctc cccgctgaa actctttgaa aagtggggct ggaagaagat tgctaccatc cagcagacca ctgaggtctt cacttcgact ctggacgacc tggaggaaac agtgaaggag gctggaaatt agattacttt cgcagagagt ttcttctcag atccagctgt gccgtcaaa aacctgaagc gccaggtatc ccgaatcatc gtgggacttt tctatgagac tgaagcccg aaagtctttt gtgaggtgta caaggagcgt ctctttggga agaagtacgt ctggttcttc attgggtggt atgtgacaa ttggttcaag	Homo sapiens

atctacgacc cttctatcaa ctgcacagtg gatgagatga ctgaggcgggt ggaggggccac
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398	17535	Gaba (b) Receptor 1	NP_001461.1	<p>catgctgagt catgtctttc ctatttgac acgtccatgt ttatccatgt actttccctg tgtaacctcc atgtaccttg tgtactttct tccctaaat catggtattc ttctgacaga gccatatgta ccttaccttg cacattgta tgcaatttc cccaattcat gtttggtggg gccatccaca cctctcctt gtacagaaat ctccattct gctcagattc cccccatctc cattgcattc atgtactacc ctacagctac actcacaatc acttctccc agactgctc ccttttgttt tgtgtttttt tgaggggaat taaggaaaaa taagtggggg caggtttggg gagctgcttc cagtggtatg ttgatgagaa tcctgaccaa aggaaggcac ccttgactgt tgggatatag agatggacct atggggtggg aggtggtgtc ccttcacac tgtggtgtct cttggggaag gatctcccc gatctcccc aatctcaata acccagtga cagtgtgact cggcaaaaa aaaa</p>	Homo sapiens
				<p>MLLLLLAPL FLRPPGAGGA QTPNATSEGC QIIHPPWEGG IRYRGLTRDQ VKAINFLPVD P YEIEYVCRGE REVVGPKVRK CLANGSWTDM DTPSRCVRIC SKSYLTLENG KVFLTGGDLP ALDGARVDFR CDPDFHLVGS SRSICSQGW STPKPHCQVN RTPHSERRAV YIGALFPMSG GWPGQACQP AVEMALEDNV SRDILPDYE LKLIHDSKC DPGQATKYLY ELLYNDPIKI ILMPGCSVS TLVAEARMW NLIVLSYSS SPALSNRQRF PTFTRTHPSA TLHNPTRVKL FEKWGWKKIA TIQQTTEVFT STLDLEERV KEAGIEITER QSFSDPAVP VKNLKRQDAR IIVGLFYETE ARKVCFEVYK ERLFGKKYW FLIGWYADNW FKIIDPSINC TVDEMTAEVE GHITTEIVML NPANTRISIN MTSQEFVEKL TKRLKRHPPE TGGFQEAPLA YDAIWALALA LNKTSGGGR SGVRLEDFNY NNQITDQIY RAMNSSFEG VSGHVVDAS GSRMAWTIE QLQGSYKKI GYDSTKDDL SWSKTDKWI GSPADQTLV IKTFELSQK LFISVSVLSS LGIVLAWVCL SENIYNHVR YIQNSQPNLN NLTAVGCSLA LAAVFPLGLD GYHIGRNQFP FVCQARLWLL GLGFSLGYS NFKIWWVHT VFTKKEEKE WRKTLPEWKL YATVGLLVGM DVLTLAIWQI VDPLHRTIET FAKEPKEDI DVSLPQLEH CSSRKMNTWL GIFYGYKGLL LLLGIFLAYE TKSVSTEKIN DHRAVGMALY NVALCLITA PVTMILSSQQ DAAFAFASLA IVFSSYITLV VLFVPMRRL ITRGEWQSEA QDTMKTGSST NNNEEKSLR LEKENRELEK IIAEKEERVS ELRHQLQSRQ QLRSRRHPPT PPEPSGGLPR GPPEPPDRLS CDGSRVHLLY K</p>	
399	17666	Glucagon- Like Peptide 1 Receptor	NM_002062	<p>gaattccggg ttgtgcatc cactctggaa ccgctcgtgt gtggcctgtc ggaatgacat A cgccctcatc agtctccga cgcgttccc aggtggcagc gatggcccag tccgaaactc cccgccatgg ccggcgccc ccggccgctg cgcctgcgc tgcctgtgtc cgggatggtg ggcaggccg gcccccgccc ccagggtgcc actgtgtccc tctggagac ggtgcagaaa tggcgagaa accgacgcca gtgccagcg tccctgactg aggatccacc tccctgccaca gactgttct gcaaccggac ctccgatgaa tacgctgtct ggccagatgg ggagccaggc tggttcgtga atgtcagctg cccctgtgtac ctgcctggg ccagcagtgt cccgagggc cacgtgtacc ggttctgcac agctgaaggc ctctggctgc agaagacaa cccagcctg ccctggaggg acttgtcga gtgcgaggag tccaagcagc gggagagaag ctccccggag gagcagctcc tgttctcta catcatctac acggtgggt acgactctc ctctctgtct ctggttatcg cctctgcgat cctctcggc ttcagacacc tgcactgcac caggaactac atccacctga acctgtttgc atcttcatc ctgcgagcat tgcctgtctt catcaaggac gcagccctga agtggtatga tagcacagcc gccacagc accagtggga tgggtcctc tctacacctg actctctag ctgccgcctg gtgtttctgc tcatgagta ctgtgtggcg</p>	Homo sapiens

400	17666	Glucagon-Like Peptide 1 Receptor	NP_002053.1	gccaattact actggctctt ggtgagggc gtgtacctgt acacactgtt ggccttctcg gtcttatctg agcaatggat cttcaggctc tacgtgagca taggtgggg tggtcccttg ctgtttgttg tccctgggg cattgtcaag tacctctatg aggacgagg ctgctggacc aggaaactcca acatgaacta ctggctcatt atccggctgc ccattctctt tgccattggg gtgaacttcc tcatctttgt tcgggtcatt tgcatcgttg tatccaaact gaaggccaat ctcatgtgca agacagacat caaatgcaga cttgccaagt ccacgtgac actcatcccc ctgtgggga ctcattgagt catctttgcc tttgtgatgg acgagcagc ccgggggacc ctgcgcttca tcaagctgtt tacagagctc tccttcacct cttccaggg gctgatgtg gccatattat actgctttgt caacaatgag gtccagctgg aatttcggaa gagctgggag cgctggcgcc ttgagcactt gcacatccag agggacagca gcatgaagcc cctcaagtgt cccaccagca gcctgagcag tggagccacg gcgggcagca gcatgtacac agccacttgc caggcctcct gcagctgaga ctccagcgc tgccctcctt ggggtccttg ctgcagccgg gtggccaatc cagcctcccc cacaatatcc MAGAPGRLRL ALLLLGMVGR AGPRPQATV SLWETVQKWR EYRQCQRSL TEDPPPATDL P FCNRTFDEYA CWPDGEPSF VNVSCPWYLP WASSVPQGHV YRFCTAEGW LQKDNSSLPW RDLSECEESK RGERSSPEEQ LLFLYIIYTV GYALSFSAIV IASAILLGER HLHCTRNIIH LNLFASFILR ALSVFIKDAAL KWMYSTAAQ QHWDGLLSY LDSLSCLRVF LLMQYCVAAV YYWLLVEGVY LYTLAFLSVL SEQWIFRLVY SIGWGVPLLF VVPWGVIVKYL YEDEGCWTRN SNMNYWLIIR LPILFAIGNV FLIFVRVICI VVSKLKANIM CKTDIKCRLA KSTLTILPLL GTHEVIFAFV MDEHARGTLR FIKLFTELSF TSFQGLMVAI LYCFWNNEVQ LEFRKSWERW RLEHLHIQRD SSMKPLKCPT SSLSSGATAG SSMYTATCQA SCS gcctgcaca tggagatgct tagctgaggg ggtggctttg ttagactatt tgcaggctcg A gagatagagc ctgagatggg gactggggc cctgcctggg ggattgggtc gtgacctgtg tggagcccca cactgagctg cagtgggttg gagggttggt ttacaggggt gctctgtgca gcccctctga ttttcccttg ggagtcctcg gtcacgggga aggagggagc tggcccgaggc cacacagctc actgggcggc tctcactccc ccagggtctg ctgctggcgg gatggacac ctggaggagg tgaactgggc caatgggagc acagcgtac cccacacctt ggacccaac atcagtgtgc ctcatcgtg cctgctgctg ctctacgaag acattggcac ctccagggtc cggtaactgg accctctgct gctcatcccc aatgtgctct tctcatctt cctgctctgg aagcttccat ctgctcgggc gaagatccgc atcacctcca gccccatttt tatcaccttc tacatccctg tgtttgtggt ggcgctggtg ggcattgccc gggcctgggt atccatgacg gtgagcacct cgaacgctgc aactgttctt gataagatcc tgtgggagat caccggcttc ttcctgctgg ccatcgagct gactgtgac atccctgggc tggccttttg cactggggag agtaagtcca gcatcaagcg ggtgctggcc atcaccaag tgcgttccct ggcctactct gtcacccagg ggaccctgga gatcctgtac atcagatccc atctctcagc tgaggacttt aatatctatg gccatggggg ccgccaagttc tggctgtgca gctcctgctt ctcttctctg gtctactctc tgggtgtcat ccttcccaag accccgctga aggagcgcac ctccctgcct tctcggagga gcttctactg gtatgcgggc atccctggcac tgcctcaacct actgcagggg ctggggagtg tgcgtctgtg cttcgacatc atcgaggggc tctgctgtgt agatgccaca accttctgt actcagctt ctctgctcgg ctcatctacg tggcttctct ccggggcttc ttcggctcgg agcccaagat cctcttctcc tacaatatgcc aagtggacga gacagaggag	Homo sapiens
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[illegible]

[illegible]

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Coupled
Receptor
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407	21632	G Protein-Coupled Receptor Ls21632	AB040964	ISAPINSLQ MAKALIKSPS QDEMLPTYLK DLSISIDKAE HEISSSPGSL GAINILDLL STVPTQVNSE MMTHVLSTVN VIIGKPVINT WKVLQQQWTN QSSQLLHVE RFSQALQSGD SPPLSFQTN VQMSSTVIKS SHPETYQORF VVIDKSYLEN LQSDSSIVTM AFPTLQAILA QDIQENFAE SLVMTTIVSH NTPYFDLRISM TFKNNSPSGG ETKCVFWNER LANNTGGWDS SGCYVEEGDG DNVTCICDHL TSFSILMSPD SPDPSSLLGI LLDIISYVGV GFSILSLAAC LVEAVVWKS VTKNRTSYMR HTCIIVNIAAS LLVANTWFI VAAIQDNRYI LCKTACVAAT FFIHFFYLSV FFWMLTJGLM LFYRLVFIH ETSRSTQKAI AFCLGYGCP L AISVITL GAT QPREVYTRKN VCWLNWEDTK ALLAFAPAL IIVVNITIT IIVITKILRP SIGDKPCKQE KSSLFQISKS IGVLTPLLGL TWGFGLTTFV PGTNLVFHII FAILNVFQGL FILLFGCLWD LKQVEALLNK FSLSRWSSQH SKSTSLSGST PVFSMSSPIS RRENLFGKT GTYNVSTPEA TSSSLENSSS ASSLLN	Homo sapiens
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Homo
sapiens408 21632 G Protein-
Coupled
Receptor
Ls21632 BAA96055.1

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Homo
sapiens409 22315 G Protein-
Coupled
Receptor
GPR92/GPR93 NM_020400

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Homo
sapiens

410 22315 G Protein-
Coupled
Receptor
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SSFTQCPQDS AL

Homo
sapiens

411 22925 Latrophilin-
3 NM_015236
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412 22925 Latrophilin- NP_056051.1 MWPSQLLIEM MLAPIIHAF SRAPIPMAV RRELSCESYP IELRCPGTDV IMIESANYGR P Homo sapiens
3

413	25359	G Protein- Coupled Receptor GPR34	NM_005300	<p>YECVPYKVEQ KVFLCPGLLK GYQSEHLFE SDHQSGAWCK DPLQASDKIY YNPWTPYRTD TLTEYSSKDD FIAGRPTTTY KLPHRVDGTG FVVDGALFF NKERTRNIVK EDLRTRIKSG EAIIANANYH DTSPYRWGGK SDIDLAVDEN GWMVIYATEQ NNGKIVISQL NPYTLRIEGT WDTAYDKRSA SNAFMICGIL YVVKSVYEDD DNEATYATKID YIYNTDQSKD SLVDVPFPNS YQYIAADVYN PRDNLLYVWN NYHVVKYSLD FGPLDSRSGQ AHGQVSYIS PPIHLDSELE RPSVKDISTT GPLGMGSTTT STTLRTTTL SGRSTTPSVS GRNRSTSTP SPAVEVLDDM TTHLPSASSQ IPALEESCEA VEAREIMWFK TRQQIAKQP CPAGTIGVST YLCLAPDGIW DPQGPDLNSC SSPWNHITQ KLSGETAAN IARELAEQTR NHLNAGDITY SVRAMDQLVG LLDVQLRNLT PGGKDSAARS LNKLOKRERS CRAYVQAMVE TVNNLLQPQA LNAWRDLTTS DQLRAATMLL HTVEESAFVL ADNLLKTDIV RENTDNIKLE VARLSTEGNL EDLKFPENMG HGSTIQLSAN TLKQNGRNGE IRVAFVLYNN LGPYLSTENA SMKLGTEALS TNHSHVIVNSP VITAAINKEF SNKVYLADPV VFTVKHIKQS ENFNPNCSF WSYSKRTMTG YWSTQGCRLL TTNKTHHTCS CNHLTNFAVL MAHVEVKHSD AVHDLILDVI TWVGILLSLV CLLICIFTEC FFRGLQSDRN TIHKNLCISL FVAELLFLIG INRTDQPIAC AVFAALLHFF FLAFTWMFL EGVQLYIMLV EVFESEHSRR KYFYLVG YGM PALIVAVSAA VDYSYGTDK VCWLRLDTYE IWSFIGPATL IIMLVIFLG IALYKMFHHT AILKPESGCL DNINYEDNRP FIKSWVIGAI ALLCLLGLTW AFGIMYINES TVIMAYLEFI ENSLQGMFIF IFHCVLQKKV RKEYGKCLRT HCCSGKSTES SIGSGKTS GS RTPGRYSTGS QSRIRRMWMD TVRKQSESSF ITGDINSSAS LNREPYRETS MGVLNLIAYQ IGASEQCQGY KCHGYSTTEW</p> <p>atgagaaagtc ataccataac aatgacgaca acttcagtcac cacagaatgc gcttataaac caatcatagc gaccaaacgc ccaaatgta ctactgtcc catggatgaa aaattgctat tactctgta tttcatcgt gggactgggt ggaacataaa ggattaccac gtaaaagaaa ttccattcaa attatctac ctcctactca tcttctgcct cctttccga ataatgtatc acactagggtg tgattctgtg caaggtgtg ggaacactgt agcattattt tgcttggtt catcagtttg gatcgctata cagcaacgga aggcaataac aaccaaaaca agtatttatg cttgctcttg gtggattcct aactatgatt attttaacac tccacaaatgt gtttccatta cagagataag cataacgcaa ttcattcttg tggtaatggt ctggctaatt ttcttactaa attgggaaga atctattgag gatttctaaa aggaggtcaa tatgccacta cagctcgtaa ctctcttatt tcttactata ccctatcatg cctttcgatt catctacatt tcttcacagc tggaagaaaa ttgttcacaa aaccaatgag atcatcgtg tgcttagatc cagtcagtga tttcctgatg tccagtaaca cttcttttta gacgatttca aggtgaacca agtaggagtg ccaggatact cctgcatga tacatctgtg gcagtgaaaa acttga</p> <p>gcagctggcc ttactcctcc A cacaaaaact ctacgacaac ctactgtgtt aaccacatcc tcgcccctta tgtatttctg ttaacgtagc cattgcagac aaacaagtgg ttatatgaa catgtacatt taaaaaataa tcggtctata tctgttgtat agtatggatg ttaagaaaagg agggcataat aaggagaagc catttttaac taatcctttc atatattaag aatttcctaa ttctggtaaa ttttactat atgttttgtt taaatgtatc atcttgctac ttctctcatc ttccaatagt ttcgcaaaaat aatgtgcaa aaagcacttc agaatttaa tacagtctag ttctaaaaagt</p>	Homo sapiens
414	25359	G Protein- Coupled	NP_005291.1	<p>MRSHTITMTT TSVSSWPYSS HRMREITNHS DQPPQNFESAT PNVTTCPMDE KLLSTVLTTTS P YSVIFIVGLV GNIIALYVFL GIHRKNSIQ IYLLNVAIAD LLLIFCLPFR IMYHINQNKW</p>	Homo sapiens

Receptor
GPR34

415 30698 AX068267

G Protein-
Coupled
Receptor
Ls30698

Homo
sapiens

TLGVILCKVV GTLFYNNMYI SIILLGFISL DRYIKINRSI QQRKAITTKQ SIYVCCIVMM
LALGGFLTMI ILTLKKGHN STMCIFYRDK HNAKGEAIFN FILVMEFLI FLLILSYIK
IGKNLLRISK RRSKEPNSGK YATTARNSEI VLIIFTICFV PYHAFRFIYI SSQNVSSCY
WKEIVHKTNE IMLVLSSEFS CLDPVMYFLM SSNIRKIMCQ LLFRFQGEF SRSESTSEFK
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416 30698 G Protein- Coupled Receptor Ls30698 CAC27252.1 Homo sapiens

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417 30875 G Protein- Coupled Receptor GPR87/GPR95 NM_023915 Homo sapiens

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418	30875	G Protein-Coupled Receptor GPR87/GPR95	NP_076404.1	gtgtaggcct tttattgttt gttggaatcg atatgtacaa agtgtaataa aatgtttctt ttcattatcc ttaaaaaaaa aa MGNFLTAKL PNNELHGES HNSGRSDGP GKNITLHNEF DTILPVLVL IIFVASILLN P GLAVWIFFHI RNKTSFIYL KNIVVADLIM TLTFPRIVH DAGFGPWFK FILCRYTSVL FYANNYTSIV FLGLISIDRY LKVVKPFDS RMYSTFTKV LSVCVWVMA VLSLPNIILT NGQPTEDNIH DCSKLKSPIG VKWHTAVTV NSCLFVAVLV ILIGCYAIS RYHKSSRQF ISQSRKRKH NOSIRVAVV FFTCFIPYHL CRIPFTFSL DRLLDESAQK ILYYCKEITL FLSACNVCLD PIYFFMCRS FSRRLFKKSN IRTSESIRS LQSVRRSEVR IYYDYTDV ggccttatct ttccagtcgt ccagatgct ctgcccaccc cagccgagg tgcactgacc A atgagcctca actcctccct cagctgcagg aaggagctga gtaatctcac tgaggaggag ggtggcgaag ggggcgtcat caccaccag ttcacgcga tcatgtcat caccattttt gtctgctgg gaaacctggt cactgtggtc acctgtgaca agaagtccta cctcctcacc ctcagcaaca agtctgctt cagcctgact aggtccaaact tctgtgctc cgtgttggtg ctgctttttg tggtagcag ctccatccgc agggaaatgga tctttggtgt agtgtggtg aactctctg cctcctcta cctgctgac agctctgcca gcatgctaac cctcggggtc attgcccacg accgctacta tctgtgctg taccctatgg tctaccccat gaagatcaca gggaaccggg ctgtgatggc actgtgttac atctggcttc actcgtctat cggctgcctg ccaccctgt ttggttggtc atcctgtgag ttgacagat tcaaatggat gtgtgtggt gcttgaccac gggagcctgg ctacacggcc ttctggcaga tctgtgtgc cctcttcccc ttctgtgca tctgtgtgtg ctatggcttc atctccgcg tggccagggt caaggcacgc aaggtgact gtggcacagt cgtcactgtg gaggaggatg ctacagaggac cgggaggag aactccagca cctccacctc ctcttcaggc agcaggaggga atgccttca ggtgtggtc tactcggcca accagtcaa agcctcact accatctcgtg tggctcctgg tgccttcacg gtcacctggg gcccctacat ggtgtgctc cctctgagg cctctgggg gaaaagctcc gtctcccgga cctggagac ttgggcccaca ttgctgtcct ttgccagcgc tgtctgccac ccccgatct atggactctg gaacagaca gtctgcaaa aactactgg catgtgcttt gggaccgggt attatcgga accatttgt caacgacaga ggaactccag gctctcagc atttccaaca ggtacacaga cctgggcttg tccccaccc tcaactgcgt catggcagg ggacagcccc tggggcacag cagcagcacg ggggacactg gcttcagctg ctcccaggac tcaggtaacc tgcgtgcttt ataagcctct cactgtcgc gttttccctg tgtgtcgctt cccccgctg cgtttcccc tgtgcaggct caagagctgg cggaggggca ttcccacgg tg	Homo sapiens
419	31568	G Protein-Coupled Receptor RE2	NM_007369	MSLNSSLSCR KELSNTLEE GEGGVITQ FIAIIVITF VCLGNLVIV TLYKSYLLT P LSNKEVFSIT LSNFLLSVLV LPFVVTSSIR REWIFGVVWC NFSALLYLLI SSASMLTIGV IAIDRYXAVL YPMVPMKIT GNRVAMALVY IWLHSLIGCL PPLFGWSSVE FDFKWMCV AWHREPGYTA FWQIWCALFP FLVMLVCYGF IFRVARVKAR KVHCCTVVIV EEDAQRTGRK NSSTSTSSG SRNFAQGVV YSANQCKALI TILVVLGAFM VTWGPYMWVI ASEALWKKSS VSPSLEIWTAT WLSFASAVCH PLIYGLWNT VRKELGMC FGDYREPFV QRQTSRLFS ISNRITDLGL SPHLTALMAG GQPLGHSST GDTGFSQSD SGNLRL atggacacct cccggctcgg tgtgctcctg tctgtgctg tctgtgctgca gctggcgacc A gggggcagct ctcccaggtc tgggtgtgtg ctgagggggt gccccacaca ctgtcattgc	Homo sapiens
420	31568	G Protein-Coupled Receptor RE2	NP_031395.1	gtgtaggcct tttattgttt gttggaatcg atatgtacaa agtgtaataa aatgtttctt ttcattatcc ttaaaaaaaa aa MGNFLTAKL PNNELHGES HNSGRSDGP GKNITLHNEF DTILPVLVL IIFVASILLN P GLAVWIFFHI RNKTSFIYL KNIVVADLIM TLTFPRIVH DAGFGPWFK FILCRYTSVL FYANNYTSIV FLGLISIDRY LKVVKPFDS RMYSTFTKV LSVCVWVMA VLSLPNIILT NGQPTEDNIH DCSKLKSPIG VKWHTAVTV NSCLFVAVLV ILIGCYAIS RYHKSSRQF ISQSRKRKH NOSIRVAVV FFTCFIPYHL CRIPFTFSL DRLLDESAQK ILYYCKEITL FLSACNVCLD PIYFFMCRS FSRRLFKKSN IRTSESIRS LQSVRRSEVR IYYDYTDV ggccttatct ttccagtcgt ccagatgct ctgcccaccc cagccgagg tgcactgacc A atgagcctca actcctccct cagctgcagg aaggagctga gtaatctcac tgaggaggag ggtggcgaag ggggcgtcat caccaccag ttcacgcga tcatgtcat caccattttt gtctgctgg gaaacctggt cactgtggtc acctgtgaca agaagtccta cctcctcacc ctcagcaaca agtctgctt cagcctgact aggtccaaact tctgtgctc cgtgttggtg ctgctttttg tggtagcag ctccatccgc agggaaatgga tctttggtgt agtgtggtg aactctctg cctcctcta cctgctgac agctctgcca gcatgctaac cctcggggtc attgcccacg accgctacta tctgtgctg taccctatgg tctaccccat gaagatcaca gggaaccggg ctgtgatggc actgtgttac atctggcttc actcgtctat cggctgcctg ccaccctgt ttggttggtc atcctgtgag ttgacagat tcaaatggat gtgtgtggt gcttgaccac gggagcctgg ctacacggcc ttctggcaga tctgtgtgc cctcttcccc ttctgtgca tctgtgtgtg ctatggcttc atctccgcg tggccagggt caaggcacgc aaggtgact gtggcacagt cgtcactgtg gaggaggatg ctacagaggac cgggaggag aactccagca cctccacctc ctcttcaggc agcaggaggga atgccttca ggtgtggtc tactcggcca accagtcaa agcctcact accatctcgtg tggctcctgg tgccttcacg gtcacctggg gcccctacat ggtgtgctc cctctgagg cctctgggg gaaaagctcc gtctcccgga cctggagac ttgggcccaca ttgctgtcct ttgccagcgc tgtctgccac ccccgatct atggactctg gaacagaca gtctgcaaa aactactgg catgtgcttt gggaccgggt attatcgga accatttgt caacgacaga ggaactccag gctctcagc atttccaaca ggtacacaga cctgggcttg tccccaccc tcaactgcgt catggcagg ggacagcccc tggggcacag cagcagcacg ggggacactg gcttcagctg ctcccaggac tcaggtaacc tgcgtgcttt ataagcctct cactgtcgc gttttccctg tgtgtcgctt cccccgctg cgtttcccc tgtgcaggct caagagctgg cggaggggca ttcccacgg tg	Homo sapiens
421	36534	G Protein-Coupled	NM_003667	gtgtaggcct tttattgttt gttggaatcg atatgtacaa agtgtaataa aatgtttctt ttcattatcc ttaaaaaaaa aa MGNFLTAKL PNNELHGES HNSGRSDGP GKNITLHNEF DTILPVLVL IIFVASILLN P GLAVWIFFHI RNKTSFIYL KNIVVADLIM TLTFPRIVH DAGFGPWFK FILCRYTSVL FYANNYTSIV FLGLISIDRY LKVVKPFDS RMYSTFTKV LSVCVWVMA VLSLPNIILT NGQPTEDNIH DCSKLKSPIG VKWHTAVTV NSCLFVAVLV ILIGCYAIS RYHKSSRQF ISQSRKRKH NOSIRVAVV FFTCFIPYHL CRIPFTFSL DRLLDESAQK ILYYCKEITL FLSACNVCLD PIYFFMCRS FSRRLFKKSN IRTSESIRS LQSVRRSEVR IYYDYTDV ggccttatct ttccagtcgt ccagatgct ctgcccaccc cagccgagg tgcactgacc A atgagcctca actcctccct cagctgcagg aaggagctga gtaatctcac tgaggaggag ggtggcgaag ggggcgtcat caccaccag ttcacgcga tcatgtcat caccattttt gtctgctgg gaaacctggt cactgtggtc acctgtgaca agaagtccta cctcctcacc ctcagcaaca agtctgctt cagcctgact aggtccaaact tctgtgctc cgtgttggtg ctgctttttg tggtagcag ctccatccgc agggaaatgga tctttggtgt agtgtggtg aactctctg cctcctcta cctgctgac agctctgcca gcatgctaac cctcggggtc attgcccacg accgctacta tctgtgctg taccctatgg tctaccccat gaagatcaca gggaaccggg ctgtgatggc actgtgttac atctggcttc actcgtctat cggctgcctg ccaccctgt ttggttggtc atcctgtgag ttgacagat tcaaatggat gtgtgtggt gcttgaccac gggagcctgg ctacacggcc ttctggcaga tctgtgtgc cctcttcccc ttctgtgca tctgtgtgtg ctatggcttc atctccgcg tggccagggt caaggcacgc aaggtgact gtggcacagt cgtcactgtg gaggaggatg ctacagaggac cgggaggag aactccagca cctccacctc ctcttcaggc agcaggaggga atgccttca ggtgtggtc tactcggcca accagtcaa agcctcact accatctcgtg tggctcctgg tgccttcacg gtcacctggg gcccctacat ggtgtgctc cctctgagg cctctgggg gaaaagctcc gtctcccgga cctggagac ttgggcccaca ttgctgtcct ttgccagcgc tgtctgccac ccccgatct atggactctg gaacagaca gtctgcaaa aactactgg catgtgcttt gggaccgggt attatcgga accatttgt caacgacaga ggaactccag gctctcagc atttccaaca ggtacacaga cctgggcttg tccccaccc tcaactgcgt catggcagg ggacagcccc tggggcacag cagcagcacg ggggacactg gcttcagctg ctcccaggac tcaggtaacc tgcgtgcttt ataagcctct cactgtcgc gttttccctg tgtgtcgctt cccccgctg cgtttcccc tgtgcaggct caagagctgg cggaggggca ttcccacgg tg	Homo sapiens

Receptor
GPR49

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36534 422 NP_003658.1
G Protein-
Coupled
Receptor
GPR49

tcctgtgact caactcaagc cttggtaacc ttaccagct ccagcatcac ttatgacctg
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gtggcatttg tcccatgtct ctaa
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PSNLSVFTSY LDLSNMNISQ LLPNPLPSLR FLEELRLAGN ALTYIPKGF TGLYSLKVLV M
LQNNQLRHPV TEALQNLRLS QSLRLDANHI SYVPPSCFSG LHSRLHLWLD DNALTEIPVQ
AFRSLALQA MTLALNKIHH IPDYAFGNLS SLVVLHLHNN RIHSLGKKCF DGLHSLETLD
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PVAFLSFSSL INLTFSPEV IKFILLVVVP LPACLNPLLY ILFNPHEKED LVSLRKQTYV
WTRSKHPSLM SINSDDVEKQ SCDSTQALVT FTSSSITYDL PPSSVPSPAY PVTESCHLSS
VAFVPC

Homo
sapiens

37498 423 NM_004736
Xenotropic
and
Polytropic
Retrovirus
Receptor
(XPR1)

Homo
sapiens

actagagatg gcgggcgggc tgctctgaag agacctcggc ggcgcgaggag gaggagagaa A
gcgcagcgcc gcgcgcgcgc ggggcccctg tggggaggag tcgggagtcgc tgttgccgc
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aactttctac tataaatccc ggttttggct gcttaaaactg ctgttttcgag tatttacagc

424	37498	Xenotropic and Polytropic Retrovirus Receptor (XPR1)	NP_004727.1	<p>ccccctccat aaggtaggct ttgctgattt ctggctggcg gatcagctga acagcctgtc agtatactg atggacctgg aatataatgat ctgcttctac agtttggagc tcaaatggga tgaagtaag ggcctgttgc caataaatc agaagaatca ggaatttggc acaaatatac atatgtgtg cggtccattg ttcatgtcat tctcatttga gttaatgctg gcaagtactc gcgcgatat cgagacacaa aaaggccctt tctcatttga gttaatgctg gcaagtactc cacaactttc ttcatgtgtg cgtttgcagc cctttacagc actcacaaa aacgaggtca ctcggacact atggtgttct ttacactgtg gattgtctt tatacatca gttcctgcta taccctcatc tgggatctca agatggactg ggtctcttc gataagaatg ctggagagaa cactttctc cggaagaga ttgtataccc ccaaaaagcc tactactact gtgccataat agagatgtg attctgcgtt ttgcttggac tatccaaatc tcgattacct ctacaacttt gttgcctcat tctggggaca tcatgtctac tgcttttggc ccacttgagg ttttcggcg atttgtgtg aacttcttc gctggagaa tgaacatctg aataacttg gtgaattccg tgctgtgctg gacatctctg tggccctctt gaacagatg gatcagactc tccagaaca gatgatggac caggatgatg ggtacgaaa ccgcccagaag aatcggatcat ggaagtacaa ccagagcata tccctgcgc gctcgcct cgcttctcaa tccaaggctc gtgacactaa ggtattgata gaagacacag atgatgaagc taacacttga attttctgaa gtctagctta acatcttttg ttttctact ctacaatcct ttctcgcacc aacgcaacct ctagtacctt tccagccgaa aacaggagaa aacacataac acatcttccg agctcttccg gatcggatcc tatggactcc aaacaagctc actgtgttct ttttcttttc ttctggttta attttaattt tctattttca aaacaagtat ttacttcatt tgccaatcag aggatgtttt aagaacacaa acatagtatc ttatggattg ttacaaatca caaggacata gataacctatc aggatgaaga acaggcattg caaggacctt ctgatgggac ggtactgaga tatctcggct tccgctcagc ccggttttga atggtgaaa ccggacattg gttttaaat tttttgtcag tttatgtgga gaattttttt ctctcctca taccagcgc aaaggcactg gccgcacttg caggaaaagt gcaacttaaa gcagtacctt cattcatgaa gctacttttt aatttgatgt aacttttctt attttgggaa ggttgctggtg gtgggtggga aatatgatgt attgtttaca catagttttc tcattattta tgaacttaaa ccatacagaa tgatataact cctgtgcaat gaaggtgata acagtaaaag aaggcaggag aaaaaaaa</p>	Homo sapiens
				<p>SAQDQAPSV VTEDETVKRY FAKFEEKFFQ LQSSLDAQKE STGVTTLRQR RKPVFHLSHE LNFTGFRKIL KKHKILETS RGADWRVAHV RQKMKRLRV PPLGAAQAPAWTTFRVGLF LYRGGFLLIE FLELLGINTY GWRQAGVNHV LLACFFAPIS VFTYVYPLA LYGFVFFLI FADFLLADQL NSLSVILMDL EYMICFYSLE VQCIPAWLRF IQCLRRYRDT KRAFPHLVNA FYLWIVFYII SSCYTLIWDL KMDWGLFDKN FAWTIQISIT STTLPHSGD IIATVFAPLE VAPLNADDQT LLEQMDQDD GVRNRQKNRS DDEANT</p>	

425	40881	Lung Seven Transmembran e Receptor 2 (LUSTR2)	AX073578	agagatggca gtgagcgaga ggaggggggct cggccggcggg agccccgcgg agtgggggca A gcggctactt ctgggtgctgc tgttggtggg ctgctccggg cgcattccacc ggctggcgct sapiens gacgggggag aagcgagcgg acatccagct gaacagcttc ggtttctaca ccaatggctc tctggaggtg gattgagcg tccctgggct gggcctccgg gaggcagaag agaagtcctt gctggggggg ttcagttctca gccgggttcg gctggcgaga gttcgctcct attcaaccg ggatttccag gactgcccct tccagaaaaa cagtggcagt tccctggctc tgttccctcat caacaccaag gactgagcgg tccaggtgcg gaagtatgga gagcagaaga cgttggtttat ctttcccggg ctctcccggg aagcacctc caaacaggg cttccgaagc cacaggccac agtccccgc aaggtggatg gcggaggagc ctctgagcc agcaagccca agtcaaacacc cgagtgatt cagggctcta gtgggaagga caagacctg gttgtgggct tgagccacct caacaactcc tacaacttca gtttccagct ggtgctggc tctcaggcgg aagaaggcca gtacagcctg aacttccaca actgcaacaa ttcaagtcca gaaaggagc atccattcga catcacggtg atgatccggg agaagaaccc cgatggcttc ctgtcggcag cggagatgcc ccttttcaag ctctacatgg tcatgtccgc ctgcttctg gccgctggca tcttctgggt gtccatctc tgcaggaaac cgtacagcgt ctcaagatc cactggctca tggcggcctt ggccttccac aagagcatct ctctcctctt ccacagcatc aactactact tcatcaacag ccaggggccac cccatcgaag gccttgccgt catgtactac atcgcacacc tgcgaaggg cgccctctc ttcatacaca tgcctctgat tggctcaggc tgggccttca tcaagtacgt cctgtcggat aaggagaaga aggtctttg gatcgtgat cccatgcagg tccctggccaa cgtggcctac atcatcatcg agtcccgga ggaagcgcc agcactacg tgcgtggaa ggagattttg ttctgggtg accatctctg ctgtgtggc atctgttcc ccgtagtctg gtccatccgg catctccagg atgcgtctg cacagacggg aaggtggcag tgaacctggc caagctgaag ctgttccggc attactatg catggtctac tgctacgtct acttaccgcg catcatgcc atctgctgc agtggtgctg gcccttccag tggcagtggc tgtaccagct cttgggtgag ggtccaccc tggccttctt cgtgctcacg ggctacaagt tccagccac agggaacaac ccgtacctg agtgcacca gaggagcag gagatgttc agatggagca agtaaatgac gactctgggt tccgggaagg cctctccaaa gtcaacaaa cagccagcgg gcgggaactg ttatgatcac ctccacatct cagacaaaag ggtcgtcctc cccagcatt tctcactcct gcccttctc cacagcgtat gtggggaggt ggaggggggc catgtggacc aggcggccag ctccccggga ccccggttcc cggacaagcc catttggaa aagagtcctt tctctcccc aaatattggg cagccctgct cttaccocgg gaccacccct ccttccagc tatgtgtaca ataagacca atctgtttg ct MAVSERRGLG RGSPAEWGQR LLLVLLGCG SGRIHRLALT GEKRAIQLN SFGFYTNGL P EVELSVLRG LREABEKSLL VGFSLSRVRS GRVRSYSTRD FQDCPLQKNS SSFLVLFLIN TKDLQVVRK YGEQTLFIF PGLLPEAPSK PGLPKQATV PRKVDGGGTS AASKPKSTPA VIQGPSGKDK DLVGLSHLN NSYNFSFHV IGSQAEQGV SLNFHNCNS VPGKEHPFDI TVMIREKNPD GFLSAAEMPL FKLYMVSAC FLAAGIFWVS ILCRNTYSVF KIHWMALA FTKSISLLFH SINYFINSQ GHPIEGLAVM YYIAHLKGA LLFITIALIG SGWAFIKYVL SDKEKKVFGI VIPMQVLAV AYIIIESREE GASDYLWKE ILFLVDLIC GAILFPVWVS IRHLQDASGT DGKAVNLAK LKLFRRHYVM VICVYFTRI IAILLQVAVP FQWQWLYQLL VEGSTIAFFV LTGYKEFQPTG NNPYLQLPQE DEEDVQMEQV MTDSGFREGI SKVNKTASGR
426	40881	Lung Seven Transmembran e Receptor 2 (LUSTR2)	CAC28410.1	

427	42697	G Protein- Coupled Receptor GPR64	NM_005756	ELL	Homo sapiens
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				ctcgcggtca ggatgggtttt ctctgtcagg cagtggtggcc atggtggcag aactgaagaa	
				gttttactga cgttcaagat attccttctc taattccagt ttgtcaccac cactgtctaa attatctgtt	
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428	42697	G Protein- Coupled	NP_005747.1	MFVSVRQCGH VGRTEEVLLT PSSNEVETTS LNDVTLSLLP	FKIFLVIICL HVLVTSLEE SNETEKTKIT IVKTFNAGSV	DTDNSSLSPK KPQRNICNLS PAKLSVVSEFA P SICNDSAFFR		
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430	45937	KIAA1624 Protein	AAK57695	<p> tggagtcctg tctgagaaca tctggggtga tggaaagtat gaagaaagtc aagaagggtga ccaacggctc cgtggagccc caggcgagt gggaaggcg cgtgtgacag agccgaccct gaggatgga cgtccaaagg aaactgttaa cttattcata gtcctattgg acagcaggag cagctctac agtgaactat tggcaccacc gacagtaca ccagggcaca tggctggagc acagtggcg ggaacctga tttgtactc tctttatgg aaacgatctg tggctgttta gaggcagctg gatcctctt caggcgggaa tgggagggcg ggacagggga ggagagagag aagagaaaag gaagaattca ttttaattt aggtttcttt ttttctctt catttcggag ctctaagtg tatgcagtg tgaccccatg tgtggggaag ttagcaagg acggctggtg gagggggaag gaggtgcga ggtgtctgtc tgatgcttta ggaatgtct actgaggacc ctgggactta agaagaagg cggggagagt gccattgcct gttgggga caaaaatgaa cgaaacagg tgactttgga aagcaaatg aaaaaccagt ttaggatga gcacctggcc caggattcct gccctggct ttgcccaga ccttattcc agatgctgag agtgaccagg acagcagctc ctgagggcca gtggtcttct tcccaacagg aaaaaggc tgtgatgtcg ctgtcaggat catgccctgt ggacagcac aggtggtgg aggtggttt ctgactgaga tgttcctga tggatggaaa gaaatgtatt ttaagtcca aaagcatta tctgtggcg ttgcttgac atccactccc tgacagccca gacgagcact gtctggcttc cttcatgct tgtgctttg ttgtgttga tcagaatttt gggggaatg gaaagtttt ctcaaggagc agctgggggc agaatagta gtatttaagc aaatacttaa gtccaaagca atcatcccca ttaaaaagct tttcctgtg ctagtagga aaaaaaaaa aaaaaa MAALAPVGSF ASRGPRLAAG LRLPLMLGL QLLAEPGLGR VHHLAKDDV RHKVLNFTG P FFKDGVMVN VSSLSLNEPE DKDVTIGFSL DRTKNDGFSS YLDEDNVYCI LKKQSVSTL LILDISRSEV RVKSPPEAGT QLPKIIIFSRD EKVLQSQSEP NVNPSAGNQ TQKTDQGGKS KRSTVDSKAM GEKSFSVHNN GGAVSFQFF NISTDDQGL YSLYFHKCLG KELPSDKFTF SLDIEITEKN PDSYLSAGEI PLPKLYISMA FFFFLSGTIW IHLKRNRND VFKIHLWMAA LPFTKSLSLV FHAIDYHYIS SQGFPIEGWA VVYITHLLK GALLFITIAL IGTGWAFIKH ILSDKDKKIF MIVIPLOVLA NVAYIIIEST EEGTEYGLW KDSLFLVDLL CCGAILFPVV WSIRHLQEAS ATDGKAAINL AKLKLFRHY VLVICYIYFT RIIAFLKLA VPFQWKWLYQ LLEDETALVF FVLTYKFRP ASDNPYLQLS QEEDLEMES VVTTSGVMES MKKVKKVTNG SVEPQGEWEG AV gagtgagag99 gagggagcgc cggccgcggg agcgggatgg aaaccagcag cccgcggccc A ccgcggccca gctccaaacc ggggctgagc ctggacgccc ggctggcgct ggacactcgc ctctgggcca aggtgctgtt caccgcgctc tacgactca tctggcgctt gggcgcgcg ggcaatgagc gtccctgca cgtggtgctg aagggcgcgg cggggcgcg cggcgcgctg cgccaccacg tgctcagcct ggcgctcgcg ggcctcgcg tgctgtggt cggcgctgccc gtggagctct acagcttctg gtggttccac taccctggg tcttcggcga cctgggctgc cgcggtact acttcgtgca cgagctgtgc gcctacgcca cgggtgctgag cgtggcaggc ctgagcgccg agcgtgctt agcgtgtgc cagccctgc cgtggcgct cctgctgacg ccacgcccga cccggtggct ggtggcgctc tcgtgggccc cctgctcgg cctcgccctg cccatggccc tcatcatggg gcagaagcac gaactcgaga cggcgagcgg ggagccggag cccgccctgc gagtgtgac ggtgctggtg agcgcaccc cgtccaagt cttatccag gtgaatgtgc tgggtctctt cgtgctcccc ttggcactaa ctgcttctt gaatgggggtc </p>	Homo sapiens
431	50847	Neurotensin Receptor type 2	NM_012344	<p> gagtgagag99 gagggagcgc cggccgcggg agcgggatgg aaaccagcag cccgcggccc A ccgcggccca gctccaaacc ggggctgagc ctggacgccc ggctggcgct ggacactcgc ctctgggcca aggtgctgtt caccgcgctc tacgactca tctggcgctt gggcgcgcg ggcaatgagc gtccctgca cgtggtgctg aagggcgcgg cggggcgcg cggcgcgctg cgccaccacg tgctcagcct ggcgctcgcg ggcctcgcg tgctgtggt cggcgctgccc gtggagctct acagcttctg gtggttccac taccctggg tcttcggcga cctgggctgc cgcggtact acttcgtgca cgagctgtgc gcctacgcca cgggtgctgag cgtggcaggc ctgagcgccg agcgtgctt agcgtgtgc cagccctgc cgtggcgct cctgctgacg ccacgcccga cccggtggct ggtggcgctc tcgtgggccc cctgctcgg cctcgccctg cccatggccc tcatcatggg gcagaagcac gaactcgaga cggcgagcgg ggagccggag cccgccctgc gagtgtgac ggtgctggtg agcgcaccc cgtccaagt cttatccag gtgaatgtgc tgggtctctt cgtgctcccc ttggcactaa ctgcttctt gaatgggggtc </p>	Homo sapiens

432	50847	Neurotensin Receptor type 2	NP_036476.1	PSSNPGLSLD ARLGVDTRLW AKVLFALYA LIWALGAAGN ALSVHVVLKA P	Homo sapiens
				acagttagcc acctgctggc cctctgctcc caagtgcctt ccaattctac cccgggcagc tccaccccca gccgcctgga gctgctgagt gaggagggtc tccctgctt catcgatgg aagaagacct ttatccaggg agccagggtc agctgggtga tacataaaga cgtgcgcgg atccgagcc tccagcgag cgtccagggt ctcagagcca tcgtggtcat gtatgtcatc tgctggctgc cgtaccatgc ccgagggtc atgtactgct acgtacctga tgacgcgtgg actgacccac tgtacaattt ctaccactac ttctacatgg tgaccaaac actttctac gtcagctcag ctgtgactcc tcttctctac aacgcgtgt cctcctcctt cagaaaaactc ttcctggaag ccgtcagctc cctgtgtgga gagcaccac ccatgaagcg gttaccccc agccccaga gtccaccctt aatggataca gctcagggt ttggggatcc ccagaaaaacc cggacctgaa tgtaatgcaa gaatgaacag aacaagcaaa atgaccagct gcttagtcac ctggcaaac aggtgagcaa cctcatcact aatcattcaa gcttcgcagc caggcgact tctatcaacc cctgctctgc tgagaacctc caagcgagc gaagccacgt gacccctcct agcctcagc tccctcgtct gtgtagtgg gataaagaac agcaccatc tcttagtgtt gcctgagact aaagtgtcta gcacagaacc tgggtcgtag tagatgctca ataaattttt gctggcacg	
				RAGRAGRLRH HVLSLALAGL LLLLVGPVE LYSEWFHYP WFGDLGCRG YFVHELCA ATVLSVAGLS AERCLAVCQP LRARSLTPR RTRWLVALSW AASLGIALPM AVIMGQKHEL ETADGEPEPA SRVCTVLVSR TALQVFIQVN VLVSFVLPLA LTAFLNGVTV SHLLALCSQV PSTSTPGSST PSRLLELSEE GLLSFIWKK TFIQGGQVSL VRHKDVRIR SLQRSVQVLR AIVVMYVICW LPYHARLMY CYVPDDAWTD PLYNFYHYFY MVTNTLFYVS SAVTPLLXNA VSSFRKLFL EAVSSLCGEH HPMKRLPPKP QSPMLMDTAS GFDDPPETRT	
433	53440	G Protein- Coupled Receptor LS53440	AX107037	cagagaggct gtatttcagt gcagcctgcc agacctcttc tggagggaaga ctggacaaaag A ggggtcacac attccttcca tacgggttag cctctacctc cgtggtgctg gtcacagttc agcttcttca tgatggtgga tcccaatggc aatgaatcca gctgtacata cttcatccta ataggcctcc ctgggtttaga agaggctcag ttctgggttg ccttccatt gtgctccctc taccttattg ctgtgctagg taacttgaca atcatctaca ttgtgaggac tgagcacagc ctgcatgagc ccatgtatat atttctttgc atgttttcag gcatgacat cctcatctcc acctcatcca tgcccaaaat gctggccatc ttctggttca attccactac catccagttt gatgcttgct tgctacagat ttttgccatc cactccttat ctggcatgga atccacagtg ctgctggcca tggcttttga ccgctatgtg gccatctgtc accactgcg ccatgccaca gtacttacgt tgcctcgtgt caccaaaatt ggtgtggctg ctgtggtgctg gggggctgca ctgatggcac ccttccctgt cttcatcaag cagctgccct tctgcgctc caatatcctt tccattctct actgcctaca ccaagatgtc atgaagctgg cctgtatga tatccgggtc aatgtcgtct atggccttat cgtcatcctc tccgccattg ccctggactc acttctcatc tcttctcat atctgcttat tcttaagact gtgtgggctg tgacacgtga agccaggcc aaggcatttg gcactgctgt ctctcatgtg tgtgtgtgtg tcatattcta tgtaccttc attggattgt ccatggtgca tgccttttag aagcggcgtg actctccgt gccgtcatc ttggccaata tctatctgct ggttctctct gtgctcaacc caattgtcta tggagtgaag acaaaggaga ttcgacagcg catccttcca cttttccatg tggccacaca cgcttcagag ccctagggtg cagtgatcaa acttcttttc cctctgattc cctctgattc agattttaat	Homo sapiens

gttaacattt	tggaagacag	tattcagaaa	aaaaatttcc	ttaataaaaa	atacaactca			
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agctatgtgt	tacacagagt	aaatcaccag	aagcctggat	ttctgaaaaa	actgtgcaga			
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aaaaataaagt	actattgtgt	caagaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa			
aaaaaaaaaa	aaaaaa							
434	53440	G Protein- Coupled Receptor LS53440	CAC38935.1	MMVDPNGNES PMYIFLCMLS MAFDRYVAIC YCLHQDVMKL GTCVSHVCAV IRQRILRLFH	SATYFILIGL GIDILISTSS HPLRHATVLT ACDDIRNVV FIFYVFFIGL VATHASEP VATHASEP	AVPLCSLYLI NSTTIQFDAC AVVRGALMA GLDSLISFS YGLIIVISAI SMVHRSKRR DSPLPVILAN	AVLGNLTIIY LLQMFALHSL PLPVFIKQLP YLLILKTVLG IYLLVPPVLN PIYGVKTKE	Homo sapiens

Homo sapiens

436	54053	Gaba (b) Receptor 2	NP_005449.1	gaaaagacca cctacattaa acagaaccac taccaagagc tcaatgacat cctcaacctg gaaaacttca ctgagagcac agatggagga aaggccattt taaaaatca cctcgatcaa aatccccagc tacagtggaa cacaacagag cctctcga cctcgaaga tccatataga gatataaact ctccagaaca catccagcgt cggtgtgccc tccagctccc catcctccac cacgcctacc tcccatccat cggagggcgt gacgccagct gtgtcagccc ctgctcagc cccaccgcca gcccccgcca cagacatgtg ccaccctcct tccgagtcac ggtctcgggc ctgtaa	Homo sapiens
437	55728	ETL protein	NM_022159	IMPLTKEVAK GSIGRGVLPV VELAIEQIRN ESLLRPYFLD LRLYDTECDN AKGLKAFYDA IKYGNHLMV FGGVCPSTVS IIAESLQGNV LVQLSFAATT PVLADKKKYP YFFRTVPSDN AVNPAILKLL KHYQWKRVGT LTQDVQRFSE VRNDLTGVLY GEDIEISDTE SFSNDPCTSV KKLKGNDVRI ILGQFDQNMV AKVFCCAYEE NMYGSKYQWI IPGWYEPSWW EQVHTEANSS RCLRNLLAA MEGYIGVDFE PLSSKQIKTI SKTPOQYER EYNNKRSVG PSKEHGYAYD GIWVIKTLQ RAMELTHASS RHQRIQDFNY TDHTLGRILL NAMNETNFFG VTGQVVERNG ERMGTIKFTQ FQDSREVKVG EYNAVADTLE IINDTIRFQG SEPPKDKTII LEQLRKISLP LYSILSALTI LGMIMASAFI FENIKNRNQK LIKMSSPYMN NLIILGGMLS YASIFLFGLD GSFVSEKTFE TLCTVRTWIL TVGYTTAFGA MFAKTWRVHA IFKNVMMKKK IIKDQKLLVI VGGMLLIDLC ILICQAVDP LRRIVEKYSM EPDPAGRDIS IRPLLEHCEN THMTIWLGI YAYKGLIMLF GCFLAWETRN VSIPALNDSK YIGMSVYVNG IMCIIGAAVS FLTRDQPNVQ FCIVALVIF CSTITLCLVE VPKLITLRTN PDAATQNRFF EKTYYIKQNH YQELNDILNL NQASTSRLEG KAILKNHLDQ NPQLQWNTTE PSRTKQDPIE DINSPEHIQR RLSLQLFILH HAYLPSIGGV DASCVSPCVS PTASPRHRHV PPSFRVMVSG L gtgaaattta aactccagtc ctgtggcgaa aatgctaatt gcactaacac agaaggaagt A tattattgta tgtgtgtacc tggcttcaga tccagcagta accaagacag gtttatcact aatgatggaa cgtctgtat agaaaatgtg aatgcaaaact gccatttaga taatgtctgt atagctgcaa atattaataa aactttaaca aaaatcagat ccataaaaga accgtggct ttgctacaag aagctctatag aaattctgtg acagatcttt caccacacaga tataattaca tatatagaaa tattagctga atcatcttca ttactagggtt acaagaacaa cactatctca gccaaggaca ccttttctaa ctcaactctt actgaatttg taaaaaccgt gaataatttt gttcaaaagg atacatttgt agttgggac agtttatctg tgaatcatag gagaacacat cttcaaaaac tcatgacacac tgttgaacaa gctactttaa ggatatacca gagctccaa aagaccacag agttgatac aaattcaacg gatatagctc tcaaaagtttt cttttttgat tcataataca tgaacatat tcatcctcat atgaatatgg atggagacta cataaaatata tttccaaaga gaaaagctgc atatgattca aatggcaatg ttgcagttgc atttttatat tataagagta ttggtccttt gctttcatca tctgacaact tcttattgaa acctcaaaat tatgataatt ctgaagagga ggaagagtc atattctcag taatttcagt ctcaatgagc tcaaacccac ccacattata tgaacttgaa aaaaatacat ttacattaaag tcatcgaaaag gtcacagata ggtataggag tctatgtgca ttttggaaat actcacctga taccatgaat ggcagctggc cttcagaggg ctgtgagctg acatactcaa atgagaccca cacctcatgc cgctgtaac acctgacaca ttttgcaatt ttgatgtcct ctgttccttc cattggtatt	Homo sapiens

438	55728	ETL protein	NP_071442.1	MCVPGERSSS NQDRFITNDG TVCIENVNAN CHLDNVCIAA NINKTLTKIR SIKEPVALLQ P EYRNSVTDL SPTDIIITYE ILAESSSLG YKNNTISAKD TLSNSTLTFE VKTVNNFVQR DTFVWDKLS VNHRRTHLTK LMHTVEQATL RISQSFQKTT EFDTNSTDIA LKVEFFDSYN MKHIHPHNM DGDYINIFPK RKAAYDSNGN VAVAFLYYKS IGPLSSSDN FLLKPQNYDN SEEEERVISS VISVSMSSNP PTLYELEKIT FTLSHRKVTD RYRSLCAFWN YSPDTMNGSW SSEGCELTYS NETHTSCRCN HLTHFAIIMS SGPSIGIKDY NILTRITQLG IISLICLAI CIFTFFFFSE IQSTRTTIHK NLCCSLFLAE IVFLVGINTN TNKLFCSIIA GLLHYFFFLAA FAWMCIEGII LYLIIVGVYIY NKGFHLKNFY IFGYLSPAVV VGESAALGYR YGTTKVCWL STENNFWSF IGPACLIILV NLLAFGVIIY KVRHTAGLK PEVSCFENIR SCARGALALL FLLGTTWIFG VLHVHVASV TAYLFTVNSA FQGMFIFLFL CVLSRKIQEE YYRLFKNVPC CFGCLR	Homo sapiens
439	56923	Muscarinic acetylcholine Receptor M3	NM_000740	atgaccttgc acaataacag tacaacctcg cctttgtttc caaacatcag ctctcctcgg A atacacagcc cctccgatgc agggctgccc cggggaaccg tcaactattt cggcagctac aatgtttctc gagcagctgg caatttctcc tctccagacg gtaccaccga tgacctctg ggaggtcata ccgtctggca agtgggtctt atcgcttctc taacgggcat cctggccttg gtgaccatca tcggcaacat cctggttaatt gtgtcattta aggtcaacaa gcagctgaag	Homo sapiens

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 LRLICALRRA AGAVRVGLAL EAATAGTPSA SPSPSPPLPP NLPEARAGPA RRARRGTSR
 GSKFPMNPY QVALFENEPa GTLILQLHAH YTIEGEERV SYMEGLFDE RSRGYFRIDS
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 RVRENLEVGY EVLTIRASDR DSPINANLRY RVLGGAWDFV QLNESGVS TRAVLDREEA
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73584

Cadherin EGF NP_055061.1

LAG Seven-

Pass G-Type

Receptor 1

(CELSR1/Flam

ingo)

Homo

sapiens

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445	74514	5-HT5A Receptor	NM_024012	<p>LTEQTLKGRL REKLADCEQS PTSSRTSSLG SGGPDCAITV KSPGREPGRD HINGVAMNVR TGSQAQADGSD SEK</p> <p>atggatttac cagtgaacct aacctccttt tccctctcca cccctccccc tttggagacc A aaccacagcc tcggcaaaaga cgacctgcgc ccagctcgc cctgtcttc cgtcttcgga gtgcttattc tcaccttgct gggctttctg gtggcgcgga cgttcgctg gaacctgctg tgctggcga ccctccctg tctacgcacc ttcaccgcg tgcaccacaa cctggtggca tccatggccg tctcgatgt cctgggtggc gcctgggtca tgcgctgag cctgggtgcat gagctgtccg ggcgcgcgtg gcagctaggt cggaggtgt gccagctttg gatcgctgc gacgtgcttt gctgcacggc cagcatctgg aacgtgacgg ccatagcctt gaccgctac tgggtccatca cgcgccacat ggaatacacg ctccgcaccc gcaagtgcgt ctccaacgtc atgatcgcg tcacctgggc actctccgt gtcatctctc tggccccgt gctttttggc tggggagaga cgtactctga gggcagcgag gagtgcacgg taagccgcga gcttctctac gccgtgttct ccaccgtagg cgccttctac ctgcgctct gtgtggtgt cttcgtgtac tggaagatct acaaggctgc caagtccgc gtgggctcca ggaagaccaa tagcgtctca cccatatccg aagctgtgga ggtgaaggac tctgccaaac agccccagat ggtgttcacg gtccgccaag ccaccgtcac ctccagcca gaaggcgga cgtggcgga gcagaaggag cagcgggccg cctcatggt gggcctctc attgcgctc tctgtctctg ctggatcccc ttctttctca ccgagctcat cagtcctctc tgctcctgt acatccccgc catctggaaa agcatcttcc tgtgcttg cttactccaa cctctctta accctctgat ctatacggt ttcaacaaga actacaacag cgccttcaag aactcttct ctaggcaaca ctga</p> <p>MDLPVNLTSE SLSTPSPLET NHSLGKDDL ALVMPLSLVH ELSSRRWQLG RRLCQLWIAC P VLATILRVRT FHRVPHNLVA SMAVSDVIVA LTRKCVSNV MIALTWALSA VISLAPLLFG DVLCCCTASIW NVTALDRY WSITRHEMT LPLCVLFVY WKIYKAKFR VGSRKTNVS WGTYSEGSE ECQVSREPSY AVFSTVGAFY EGDWREQKE QRAALMVGIL IGVFVLCWIP PISEAVEVKD SAKQPMVFT VRHATVTFQP SFENPLIYTA FNKNYNSAFK NFFSRQH FFLTELISPL CSCDIPAIWK SIFLWLGYSN cctcttaggt ccataggtct tataataatt taataaccta A gtaatgcaga gataataaaa cttcttaggt ccataggtct tataataatt taataaccta A aacatggtat acaaatctct ccaaacccaa taacataatt atagtttcaa aagttcccc aaactttcaa gttagatttt attgctttga tgagtggctt taaatatgaa aagttctgccc tgtgaagggc aatcctttc ccgtggactg ggatctatag aaatacagaa atgtgccccag gggttcatct ccctaataac catcattcac atttctcaac ctccctaata accagccacc atgtgagaag gatccacagt tactgtttat gactataatt aactagtacc tgggactggt cagtgaggtt gttgcaacc tgatgctaag gatgtcaaa ttgtctcggc ctctgttccc agccagtaag taattccctg gctcgggccc ataccctca atcttggtca gctgattatg acaggcagac agcacagtaa ataacactat ataccctca aacccaaagc atagtatca atggtatata cccaacagca tcttaggaat ggagagtctg tagcaagggc ctccaatgtg aaggtcaaca cagtcactgt gatgctgta ttctcatttt gtaaaagcatg atctctggtg gtcattttta tcttctaac ttattggaaa agtctcctgt tttggggggc cgcctctggt cacagccaga ctgactcagt tcccctggga ggtcccgcgc gagcccgctc tcccctccc tctgcccccc ccagccctc gccccacct cggcgccgc acatctgct gctcagctcc agacggcgcc cggacccccg ggcgcgggat ccagccagggt gggagccccg cagatgaggt</p>	Homo sapiens
446	74514	5-HT5A Receptor	NP_076917.1	<p>MDLPVNLTSE SLSTPSPLET NHSLGKDDL ALVMPLSLVH ELSSRRWQLG RRLCQLWIAC P VLATILRVRT FHRVPHNLVA SMAVSDVIVA LTRKCVSNV MIALTWALSA VISLAPLLFG DVLCCCTASIW NVTALDRY WSITRHEMT LPLCVLFVY WKIYKAKFR VGSRKTNVS WGTYSEGSE ECQVSREPSY AVFSTVGAFY EGDWREQKE QRAALMVGIL IGVFVLCWIP PISEAVEVKD SAKQPMVFT VRHATVTFQP SFENPLIYTA FNKNYNSAFK NFFSRQH FFLTELISPL CSCDIPAIWK SIFLWLGYSN cctcttaggt ccataggtct tataataatt taataaccta A gtaatgcaga gataataaaa cttcttaggt ccataggtct tataataatt taataaccta A aacatggtat acaaatctct ccaaacccaa taacataatt atagtttcaa aagttcccc aaactttcaa gttagatttt attgctttga tgagtggctt taaatatgaa aagttctgccc tgtgaagggc aatcctttc ccgtggactg ggatctatag aaatacagaa atgtgccccag gggttcatct ccctaataac catcattcac atttctcaac ctccctaata accagccacc atgtgagaag gatccacagt tactgtttat gactataatt aactagtacc tgggactggt cagtgaggtt gttgcaacc tgatgctaag gatgtcaaa ttgtctcggc ctctgttccc agccagtaag taattccctg gctcgggccc ataccctca atcttggtca gctgattatg acaggcagac agcacagtaa ataacactat ataccctca aacccaaagc atagtatca atggtatata cccaacagca tcttaggaat ggagagtctg tagcaagggc ctccaatgtg aaggtcaaca cagtcactgt gatgctgta ttctcatttt gtaaaagcatg atctctggtg gtcattttta tcttctaac ttattggaaa agtctcctgt tttggggggc cgcctctggt cacagccaga ctgactcagt tcccctggga ggtcccgcgc gagcccgctc tcccctccc tctgcccccc ccagccctc gccccacct cggcgccgc acatctgct gctcagctcc agacggcgcc cggacccccg ggcgcgggat ccagccagggt gggagccccg cagatgaggt</p>	Homo sapiens
447	81765	Thromboxane A2 Receptor	NM_001060	<p>MDLPVNLTSE SLSTPSPLET NHSLGKDDL ALVMPLSLVH ELSSRRWQLG RRLCQLWIAC P VLATILRVRT FHRVPHNLVA SMAVSDVIVA LTRKCVSNV MIALTWALSA VISLAPLLFG DVLCCCTASIW NVTALDRY WSITRHEMT LPLCVLFVY WKIYKAKFR VGSRKTNVS WGTYSEGSE ECQVSREPSY AVFSTVGAFY EGDWREQKE QRAALMVGIL IGVFVLCWIP PISEAVEVKD SAKQPMVFT VRHATVTFQP SFENPLIYTA FNKNYNSAFK NFFSRQH FFLTELISPL CSCDIPAIWK SIFLWLGYSN cctcttaggt ccataggtct tataataatt taataaccta A gtaatgcaga gataataaaa cttcttaggt ccataggtct tataataatt taataaccta A aacatggtat acaaatctct ccaaacccaa taacataatt atagtttcaa aagttcccc aaactttcaa gttagatttt attgctttga tgagtggctt taaatatgaa aagttctgccc tgtgaagggc aatcctttc ccgtggactg ggatctatag aaatacagaa atgtgccccag gggttcatct ccctaataac catcattcac atttctcaac ctccctaata accagccacc atgtgagaag gatccacagt tactgtttat gactataatt aactagtacc tgggactggt cagtgaggtt gttgcaacc tgatgctaag gatgtcaaa ttgtctcggc ctctgttccc agccagtaag taattccctg gctcgggccc ataccctca atcttggtca gctgattatg acaggcagac agcacagtaa ataacactat ataccctca aacccaaagc atagtatca atggtatata cccaacagca tcttaggaat ggagagtctg tagcaagggc ctccaatgtg aaggtcaaca cagtcactgt gatgctgta ttctcatttt gtaaaagcatg atctctggtg gtcattttta tcttctaac ttattggaaa agtctcctgt tttggggggc cgcctctggt cacagccaga ctgactcagt tcccctggga ggtcccgcgc gagcccgctc tcccctccc tctgcccccc ccagccctc gccccacct cggcgccgc acatctgct gctcagctcc agacggcgcc cggacccccg ggcgcgggat ccagccagggt gggagccccg cagatgaggt</p>	Homo sapiens

448	81765	Thromboxane A2 Receptor	NP_001051.1	<p>ctctgaaggt gtgcctgaac cagtgccagc ctgcccctgc tgcagcatcg gcctgatggg</p> <p>gtggtgactg atccctcagg gctccggagc catgtggccc aacggcagtt cctgggggccc</p> <p>ctgtttccgg ccacaaaaca ttaccctgga ggagagacgg ctgatacgct cgcctcggtt</p> <p>cgcgcctccc ttctgctggg tgggcctggc ctccaaactg ctggccctga gctgctggc</p> <p>gggcgcgcgg cagggggggt cgcacacgcg ctctctcttc ctacacttcc tctgcggcct</p> <p>cgtctcacc gacttcttgg gctgctgggt gaccggtacc atcgtggtgt ccagcagcgc</p> <p>cgcgtcttcc gagtggcag ccgtggaccc tggctggcgt ctctgtcgct tcatggggct</p> <p>cgtcatgac ttcttggccc tgtccccctt gctgctgggg gcgcacatgg cctcagagcg</p> <p>ctacctgggt ataccccgcc ccttctcgcg cccggcgctg gctgctggcg cctcgccctg</p> <p>ggccaccgtg gggctgggtg gggcgccgc gctggcgctg ggcctgctgc cctgctgggg</p> <p>cgtgggtcgc tacacgtgc aatacccggg gtccctggtgc ttctgacgc tgggcgcga</p> <p>gtccggggac gtggccttcg ggctgctctt ctccatgtcg ggcggcctct cggctcgggt</p> <p>gtccttctcg ctgaacacgg tcagcgtggc caccctgtgc cagcttacc acgggcagga</p> <p>ggcgggcccg cagcgtcccc gggactccga ggtggagatg atggctcagc tcttggggat</p> <p>catgggtggtg cccagcgtgt gttggctgcc ccttctggtc ttcatggccc agacagtgt</p> <p>gcgaaccccg cctgagctga gcccccgcg cagctgtgcc cgcaccacgg agaagtagct</p> <p>gtcatctac ttgcgcgtgg ccacttgaa ccagatcctg gaccctggg tgtatctct</p> <p>gttcggcccg cccgtgtccc ggcgtctcca cccctgcctc agcacccggc ccaggtcgct</p> <p>gtccctccag cccagctca cgcagcgctc cgggtgtcag taggaagtgg acagagcgcc</p> <p>cctcccgccg ctttccgcgg agcccttggc cctctggaca gcccatctgc ctgttctgag</p> <p>gattcagggg ctgggggtgc tggatggaca gtgggcatca gcagcagggg ttctgggttga</p> <p>cccaaatcca acccggggac ccccaactcc tccctgatcc ttttaccagg cactctccct</p> <p>tccctggccc ctttttccca tccagagctc ccacccttc tctgcgtccc tcccaacccc</p> <p>aggaaggcca tgcagacatt ggaagagggt cttgcattgc tatttttttt tttagacgga</p> <p>gtcttgctct gtcccacagg ctggagtga ctagctgcaat ctacgtctac tgcacacctc</p> <p>acctcccggg ttcaagcgat tctcctgctc ttttctgtat ttttagtaga gacggggttt</p> <p>cgcgcaccca cgcgcggcta attttggat ttttagtaga gacggggttt caccgtgttg</p> <p>gccaggtgg tcttgactc ctgacctcag caccacacct ggcatctttt ccccaagtg</p> <p>ctgggatcac aggcataaac caccacacct gtgattcacc agcctcagcc tcccaagtg</p> <p>ctcactctgt gcccagcct ggagtacagt ggcacgatct cggctcactg caactctccg</p> <p>ctcccgggt caagcgattc tctgctcca gctccccgag cagctgggat tacagggcgt</p> <p>agccactcg cccggccttg catgctcttt gacctgaat ttgacctact tgcctggggt</p> <p>cagttgcttc ctttgaacc tccaacagg atagctctgt ccagaaagga ttgaatgtga</p> <p>aacgggggga ccccttttc ttgcaaaaat atactctgc ctttgggttt at</p> <p> MWPNGSSSLGP CFPNPITILE ERRLIASPWF AASFVVGIA SNLLALSVA GARQGGSHTR P SSFLTFLCGL VLTDFLGLLV TGTIVSQHA ALFEWHA VDP GCRLCFMGV VMFFGLSPL LLGAAMASER YLGITRPFPSR PAVASQRRW ATVGLWAAA LALGLPLLG VGRYTVQYPG SWCFLTGAEG SGDAEGLLF SMLGGLSVGL SFLINTVSVA TLCHVYHQE AAQRPRDSE VEMMAQLLGI MVVASVCWLP LLVFIAQTVL RNPSPAMPAG QLSRTTEKEL LTYLRVATWN QILDPMVYIL FRAVLRRLQ PRLSTRPRSL SLQPQLTQRS GLQ </p>	Homo sapiens
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449	98519	Chemokine (C motif) XC Receptor 1 (CCXCR1)	C NM_005283	atggagtgctcct caggcaaaccc agagagcacc aggtctttgct accctgttctt accctgttctt actatgacct tcagagccag A	Homo sapiens
				ccgtgtgaga accaggcctg ggtctttgct accctgttctt accctgttctt ccaactgtctt ggtctgtctt gactgtctt	
				gtgtttctcc tcagcctagt gggcaacagc ctggtctctgt ggtctgtctt ggtctgtctt ggtctgtctt ggtctgtctt	
				agcctggagt cctcaccacaa catcttcttc taccactggt gctgggtgct cctctgtctt ggtctgtctt ggtctgtctt	
				gctctgcaac tctcaaatat gatcttctcc atcagcctctt accctgtctt cctctgtctt cctctgtctt cctctgtctt	
				accatcatga ccatccaccg ctacctgtctg gtagtgagcc accctgtctt cctctgtctt cctctgtctt cctctgtctt	
				ccacccctcc gctgccgggt gctggtagcc atggctgtgt ggttagccag cactgtctt cctctgtctt cctctgtctt	
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				gccaaacagc agtagaata cgtctgtctt ggtgtcagg tccgcacaa cctgtgtctt cctgtgtctt cctgtgtctt	
				tgctttaacc cgtgtcttca tgcctgtctt ggtgtcagg tccgcacaa cctgtgtctt cctgtgtctt cctgtgtctt	
				gttctcggc agtctgtgtt ctgcccgtg caggcaccca gccagcctc gatccccac	
				tccccgtgtg ccttcgccta tgaggcgcc cctcttctt ga	
450	98519	Chemokine (C NP_005274.1 SLES1N1F1 TIM1TH1R1L TW1LTSV1QH YNFTLF1Q1L VLRQFW1C1R1	C NP_005274.1	MESSGNPEST TFFYDLQSQ PCENQAWFA TLATTVLYCL FLLSLVGN LVLMLVKYE P	Homo sapiens
		motif) XC Receptor 1 (CCXCR1)		INCLSLDLF ACLLPWISF YHWGVLGDF LCKLLNMIF ISLYSIFFL	
				VVSPSLTRV PTLRCRLVT MAVVASILS SILDTIFHKV LSSGCDYSEL	
				NLFLLSLGI ILFCYVEILR TLFRRSRKR HRTVKLIFAI VVAYFLSWGP	
				AKQLEVALI ICRNLAFSHC CFNPVLYFV GVKFRTHLKH	
				SPGAFAYEGA SFY	
451	130108	G Protein-Coupled Receptor 1 GPR75	NM_006794	gcgatggcga tgatgcctct agtctctcat catccagagc ggcaggcgag ctgggggtccg A	Homo sapiens
				gactgcgaga tggaggagg ggcgcctgctg gcacccggca ggccttatctg tcttgggctt	
				ctttgtctac atattgctca tctgtgagct gaggccctga ctactgagt attttgggg	
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				cagcctaalc gcacggctc ctttccctgc accgtactcc tcacctgct tctctggg	
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				aagaacgctc aagtcagaaa gtgccccctt gtaatacag tcatgtctt cagaccacag	
				cctttcatgg ggtccctgt gcaggagggt ggagatccca tccagtgtc catgcccgt	
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452	130108	G Protein-Coupled Receptor GPR75	NP_006785.1	<p> agtcccaacc aactgggtcac cctgcagca agcgaactcc agctcgtatc agccatcaac ctctccactg ccaaggattc caaagccgtg gtcacctgtg tgatcattgt gctgtcagtc ctgggtgctt gttctccact ggggatttcc ttggtacagg ttggtctctc cagcaatggg agcttcattc ttaccagtt tgaattgttt ggatttactc ttatatcttc caagtcagga ttaaaccttc ttatatattc tcggaacagt gcagggtgtg gaaggaaagt gctctgggtg ctccaatata taggcctggg ttttttctgc tgcaaacaaa agactcgact tcgagccatg gaaaaaggga acctggaagt caacagaaac aaatcctccc atcatgaaac aaactctgcc tacatgttat ctccaaagcc acagaagaaa ttgttgagcc aggtctgtgg cccaagtcat tcaaaagaaa gtatggtgag tcccaagatc ttgtctggac atcaacactg ttgtcagagc agctcgacc ccatcaaac tcggattgaa ccttactaca gcactctata cagcagccct tcccaggagg agagcagccc atgtaactta cagccagtaa actcttttgg atttgccaat tcatatatg ccatgcatta tcacaccact aatgacttag tgcaggaata tgacagcact tcagccaagc agattccagt cccctccgtt taaagtcagt gaggcctatg gatcttatgt aaacagtctt tgttctctgat agtaatggac ttatttctaa cttgagatca gtggcggatc aaaacctaca agattcaact gaaaagtgg cagttatggt ttcttctcat ctgatgtgtc agtatctgtt gatttgcttt gtagtttgtt gacatcttaa gatttgatgt gaaagtctta gattttttac cctg </p>	Homo sapiens
453	133117	G Protein-Coupled Receptor RAIG1	NM_003979	<p> MNSTGHLQDA PNATSLHVPH SOEGNSTSLQ EGLQDLIHTA TLVCTFLLA VIFCLGSYGN P FIVLSEFFD APRKRTNFD FMILNLSFCD LFICGVTAPM FTFVLFFSSA SSIPDAFCFT FHLTSSGFII MSLKTVAVIA LHRRLMVLGK QNRTASFPK TVLLTLLLWA TSFTLATLAT LKTSKSHLCL PMSSLIAGKG KAILSLYVD FTFCVAVSV SYIMIAQTLR KNAQVRKCPP VITVDASRPQ PFMGVPVQGG GDPIQCAMPA LYRNQYNKL QHVQTRGYTK SPNQLVTPAA SRLQLVSAIN LSTAKDSKAV VTCVIIIVLSV LVCCPLGIS LVQVWLSSNG SFILYQFELF GFTLIFKSG LNPFIYSRNS AGLRRKVLWC IQYIGLGFCC CKQKRLRAM GKGNLEVRN KSSHHEITNSA YMLSPKPQKK FVDQACGPH SKESMVSPKI SAGHQHCGQS SSTPINTRIE PYYSIYNSSP SQEESSPCNL QPVNSFGFAN SYIAMHYHTT NDLVQEYDST SAKQIPVPSV ataacagcat gaagtgcctg gaaactggaa taggcgtgtc ctctccctcg accctcccc A tccttgctcc tctgtcacc cctcgctcgt tcctccctc cggcgagggc cgcctttata acaactgctc agagtgcgag ggcgggatat ctgtccaaag tctccccag cactgaggag ctgcctgct gccctcttgc gcgcgggaag cagcaccaaag ttacaggcca acgcctggc actagggtcc agaattgcta caacagtcct tgatgggttg cgaatggcc tgaatccaa gtactacaga ctttgtgata aggctgaagc ttggggcatc gtctagaaa cgttgggcac agccggggtt gtgacctcgg tggccttcac gtcactctc ccgactcctg tctgcaaggt agcggactcc aacaggcgaa aaatgctgcc tactcagttt ctctctcc caggggccac gggcatctt ggctcacct tcgcttcac cactgactg gacgggagca caggggccac acgcttcttc ctctttggga tctcttttc catctgtctt tcctgttgg tggtcatgc tgtcagctcg accaagctcg tccggggggag gaagccctt tcctgttgg tggtctggg tctggccgtg ggcttcagcc tagtccagga tgttatcgct attgaatata ttgtctgac catgaatagg accaagctca atgtcttttc tgagctttcc gctcctcgtc gcaatgaaga ctttgtctc ctgctcacct acgtcctctt cttagtggcg ctgacctcc tcatgtctc cttcaccttc tbtgggttctt tcacgggctg gaagagacat gggggccaca tctacctac </p>	Homo sapiens

454	133117 G Protein- Coupled Receptor RAIG1	NP_003970.1	gatgctctc tccattgcca tctgggtggc ctggatcacc ctgctcatgc ttcctgactt tgaccgcagg tgggatgaca ccatcctcag ctccgccttg gctgccaatg gctgggtggt cctgttggt tatgttagtc ccgagtattg gctgctcaca aagcaacgaa acccatgga ttatcctgtt gaggatgctt tctgtaaac tcaactcgtg aagaagagct atggtgtgga gaacagagcc tacttcaag aggaatacac tcaaggtttt gaagagacag gggacacgct ctatgcccc tattccacac attttcagct gcagaacacag cctcccaaaa aggaattctc catccacagg gccacgctt ggcagagccc ttacaaagac tatgaagtaa agaaagaggg cagctaaac tgctcctgaag agtgggacaa atgcagccgg gcggcagatc tagcgggagc tcaaaggat gtggcgaaa tcttgagtct tctgagaaaa ctgtacaaga cactacggga acagtttggc tccctccacag cctcaaccac aattcttcca tgcctgggct gatgtgggct agtaagactc cagttcttag aggcgtgta gtattttttt ttttttggct catcctttgg atacttctt taagtgggag tctcaggcaa ctcaagttta gaccttact ctttttggtt gtttttgaa acaggatctt gctctgtcac ccaggcttga gtgcagtgg ggcgtcacag cccagtgag cctcgaccac ctgtgtctca gcaatcctcc catctccatc tcccaagtg ctgggatgac aggcgtgagc cacagctccc agcctaggcc cttaattctt ctgttatctt ccatggacta aaggtctggt catctgagct cacgtggctc cacacagctc tagggcctg ctcctctaac tcacagtggg ttttctgagg ctctgtggcc cagagcagac ctgcatact gagcaaaaat agcaaaaagc tctctcagcc cactggcctg aatctacact ggaagccaaac ttgctggcac cccgctccc caaccttct tgcctgggta ggagaggcta aagatcaccc taaatctact catctctcta gtgctgctc acatggggcc tcagcagctc cccagcacca attcacaggt caccctctc tcttctgact gtcccaaac ttgctgtcaa ttcagagatc taatctccc ctacgctctg ccaggaaatc tttcagacct cactagcaca agcccgttg ctccttgta ggagaatttg tagatcattc tcacttcaaa ttcctggggc tgatactct ctcatctgc acccaacct ctgtaaatag atttaccgca tttacggctg cattctgtaa gtgggcattg tctcctaag gaggaagtgt cattgtataa taagtattc acctgagtat gcaataaaga tgtggtggcc actcttctc ggtggtggca gcaaaaaaaa aaaaaa MATTVPDGR NGLSKYYRL CDKAEAWGIV LETVATAGW TSVAFMLTLP ILVCKVQDSN P RRKMLPTQFL FLGLVLGIFG LTFAFIIGLD GSTGTRFFL FGILFSICFS CLLAHAVSILT KLVRGRKPLS LLVILGLAVG FSLVQDVIAI EYIVLTMRNT NVNVESELSA PRNEDFVLL LTYVLFMAL TFLMSSFTFC GSFTGWKRHG AHYILTMLLS IAIWAWITL LMLPDRRW DDTILSSALA ANGWVFLAY VSPEFWLTK QRNPMDYPVE DAFCKPQLVK KSYGVENRAY SQEETQGE ETGDTLYAPY STHFQLQNP PQKEFSIPRA HAWPSYKDY EVKKEGS atggggacct gtgacattgt gactgaagcc aatatctcat ctggccctga gagcaacacc A acgggcatca cagccttctc catgcccagc tggcagctgg cactgtggc accagctac ctggcccttg tgtggtggc cgtgacgggt aatgccatcg tcacttggat catctggcc catcggagga tgcgcacagt caccaaactac ttcactgtca atctggcgt ggcgtgacct tgcatggctg ccttcaatgc cgccttcaac tttgtctatg ccagccaca catctggtac tttggccctg ccttctgcta ctccagaac ctcttccca tcacagccat gttgtcagc atctactcca tgaccgcat tgcgtccgac aggtacatgg ccactgtcca cccctccag cctggcctt cagctccacg caccaggcg gtattgtgtg gcatctggct ggtggctctc gccctggcct cccctcagtg ctctactcc accgtcacca tggaccaggg tgcaccaaag	Homo sapiens
455	152198 Tachykinin Receptor 2	NM_001057		Homo sapiens

456 152198 Tachykinin
Receptor 2

NP_001048.1

Homo
sapiens

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GDTAPSEATS GEAGRPQDGS GLWFGYGLLA PTKTHVEI
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atttcggagg atggagaaat agcccggagt cccgtggaaa atgagccgg cggacttgct
gcagctgggt ctgctgctcg acctgcccag ggacctgggc ggaatgggt gttcgtctcc
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gtgtgaagac ataattgggt acaagtctct gagaattgtg gtgtgggttcg ttagtctgct

457 152201 Thyrotropin
Receptor

NM_000369

Homo
sapiens

458	152201	Thyrotropin Receptor	NP_000360.1	MRPADLLQLV ETHLRTIPSH ALKEPLPKF TLKLYNNGFT LPSKGLEHLK CNESMQSLR DEIIGFGQEL VWFVSLALL YYNHAIDWQT IMVGGWVCCF HVKIYITVRN ILLVLFYPLN VQKVTHDMRQ caggactgcc ttccccagta acgagagcgg aatttgacgt tctttgggtt agtgcctgac ctctcccat aattattcac tgacaatcga	ggcaatgtct tttctcatgt gcctctgtag ggccctgggt acgctgacgg cggaagatcc cttctgccc cccatggaca atagttgcct ccgcagata ttcacccgact aagcctctca tcctgtgcca atcctactca gcaagttagg gttctctcaa ggtctccaca aagcaaggcc ctcacaatgg ccaatcccat	ttgtcctgct gcaacctggc acctctacac gcaacacggc tcataccct gcctcagga tgcttccctt ccgagacccc tcgtatcgt accagggga tcatatgcct tcactgttag atccattcct gcaagttagg agaacagcac acatggaaga aaatctcaga taggggaact	tattctcctc ctttgcggat tactctgag tggtttcttc ggagcgtgg cgcatggcc ggtgggaata ctttgctctg ctgtcgtctg caagataacc ggccccaatc caactccaaa ctatgctatt cgccaggctc tgatatccag tgctattcaa agagtatatg tataaaataa tagttctctg	accagccact ttctgcatgg tactacaacc actgtctttg atgccatca cttcgccc atcatggttg agtagctatg gcatatattg aaaattgcca tcattctatg atcttgctgg ttcaccaagg cgccaggctc gttcaaaaagg cttcaaacga actccatct caaacgggtt tgtaagttaa aatatgcatt	PPSTQLKLI TRNLTYIDPD AFQGLCNETL LDVSQTSVTA KIRGILESIM HYVFFEEQE IMGYKFLRIV ASVDLYHSE RKIRLRHACA IVAFVIVCCC KPLITVNSK VPPKNSTDIO QTVL aaggacgcat agaaatacca ccctgtcata gctctactcg ctgtgttcca aaaaagctga tttcttatta ctttgggaat aatcttcttc atcatcctcc gccaggacgg	Homo sapiens
459	152245	C-C Chemokine Receptor 2	NM_000648	gagagactgc ttccccagta acgagagcgg aatttgacgt tctttgggtt agtgcctgac ctctcccat aattattcac tgacaatcga	ggcaatgtct tttctcatgt gcctctgtag ggccctgggt acgctgacgg cggaagatcc cttctgccc cccatggaca atagttgcct ccgcagata ttcacccgact aagcctctca tcctgtgcca atcctactca gcaagttagg gttctctcaa ggtctccaca aagcaaggcc ctcacaatgg ccaatcccat	ttgtcctgct gcaacctggc acctctacac gcaacacggc tcataccct gcctcagga tgcttccctt ccgagacccc tcgtatcgt accagggga tcatatgcct tcactgttag atccattcct gcaagttagg agaacagcac acatggaaga aaatctcaga taggggaact	tattctcctc ctttgcggat tactctgag tggtttcttc ggagcgtgg cgcatggcc ggtgggaata ctttgctctg ctgtcgtctg caagataacc ggccccaatc caactccaaa ctatgctatt cgccaggctc tgatatccag tgctattcaa agagtatatg tataaaataa tagttctctg	accagccact ttctgcatgg tactacaacc actgtctttg atgccatca cttcgccc atcatggttg agtagctatg gcatatattg aaaattgcca tcattctatg atcttgctgg ttcaccaagg cgccaggctc gttcaaaaagg cttcaaacga actccatct caaacgggtt tgtaagttaa aatatgcatt	PPSTQLKLI TRNLTYIDPD AFQGLCNETL LDVSQTSVTA KIRGILESIM HYVFFEEQE IMGYKFLRIV ASVDLYHSE RKIRLRHACA IVAFVIVCCC KPLITVNSK VPPKNSTDIO QTVL aaggacgcat agaaatacca ccctgtcata gctctactcg ctgtgttcca aaaaagctga tttcttatta ctttgggaat aatcttcttc atcatcctcc gccaggacgg	Homo sapiens

460	152245 C-C	NP_000639.1	Chemokine Receptor 2	MLVLSLRFEI RNTNESGEEV TFFDYDYGA PCHKFDVKQI GAQLLPPLYS LVETFGFVGN P	Homo sapiens
461	152299 Interleukin- 8 Receptor A	LG5459		<p> HIGYFGGIF IILLTIDRYL AIVHAFVFAK ARTVTFGWV SVITWLVAVE ASVPGIIFTK CQKEDSVYVC GPYFPRGWN FHTIMRNILG LVLPLLMVI CYSGILKTL RCRNEKKRHR AVRVIETIMI VFLEWTPYN IVILLNTFQE FFLSNCEST SQLDQATQVT ETLMTHCCI NPIIYAFVGE KFRRYLSVFF RKHITKRECK QCPVFYRETV DGVSTSTNTPS TGEQEVSAGL CAGAAATCCT CAGGTCCAC AGAATGAAC ACCTTTTCTA AAATAAAGTC AAGCCAAGCT A GTCCCTACCC AAAGAAAATC CTAGCAAGCA AAGGTGGCTT CCTTCCTGAG GCCCAGCCA GGTGTGTCCA ACCGTAGGAG CCACAGCTCA GAGATCAGAG TGACTTAACA GTTAGAGGGC ACTTGATGAG TAAGTGAA TAGGAAACC AAGTCAGACG ACACCTCCCT TCTGATGCC AACCATGTCT ACATCTGGAG AAGAACAGTT AAGTCAAGG ATCACAGACT TGTGATTAGA GACTGCCAGG GTCCATATGA CCAAGCGGGG GTCCCAGGTG TGAAGCTGGG GTTGAGGATC CATTATCTGA ATTTTCCACT CTATGGATGA TCACCTTTAT TCTTTTCCCT TCTTTGAATT TATTTCATT TGTATTATCC TAAATTCCCT GGTAGATCAC CTGTGAAAGC TTGCACTGT CTGATAAGAA TAAAGGGGGA AGGATTTGAC TTTACAGCAG AGACTTCAGA AGGATCCTC TCTAGGAGCA AATTGGGGC AATCCAGTGG GAAGGAGGTG GAAGACTGCA CTTGAGCTGC GTTTGGACAA CAGGCACACA ATCTTTACTT ACTTTTCAGG CTGCTTTGAG GT </p>	Homo sapiens

tcacctttgg ggtggtgaca agtgtgatca cctggttggg ggctgtgttt gcttctgtcc
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 tcttctggac tcctataac attgtcattc tcctgaacac ctccaggaa ttctcggcc
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 MLSTSRSEFI RNTNESGEEV TFFDYDYGA PCHKFDVKQI GAQLLPPLYS LVETFGFVGN P
 HIGYFGGIF IILLTIDRYL AIVHAFVFAK ARTVTFGWV SVITWLVAVE ASVPGIIFTK
 CQKEDSVYVC GPYFPRGWN FHTIMRNILG LVLPLLMVI CYSGILKTL RCRNEKKRHR
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 NPIIYAFVGE KFRRYLSVFF RKHITKRECK QCPVFYRETV DGVSTSTNTPS TGEQEVSAGL
 CAGAAATCCT CAGGTCCAC AGAATGAAC ACCTTTTCTA AAATAAAGTC AAGCCAAGCT A
 GTCCCTACCC AAAGAAAATC CTAGCAAGCA AAGGTGGCTT CCTTCCTGAG GCCCAGCCA
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 ACTTGATGAG TAAGTGAA TAGGAAACC AAGTCAGACG ACACCTCCCT TCTGATGCC
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 GACTGCCAGG GTCCATATGA CCAAGCGGGG GTCCCAGGTG TGAAGCTGGG GTTGAGGATC
 CATTATCTGA ATTTTCCACT CTATGGATGA TCACCTTTAT TCTTTTCCCT TCTTTGAATT
 TATTTCATT TGTATTATCC TAAATTCCCT GGTAGATCAC CTGTGAAAGC TTGCACTGT
 CTGATAAGAA TAAAGGGGGA AGGATTTGAC TTTACAGCAG AGACTTCAGA AGGATCCTC
 TCTAGGAGCA AATTGGGGC AATCCAGTGG GAAGGAGGTG GAAGACTGCA CTTGAGCTGC
 GTTTGGACAA CAGGCACACA ATCTTTACTT ACTTTTCAGG CTGCTTTGAG GT

462 152299 Interleukin- 8 Receptor A NM_000634 Homo sapiens

agctgttaag tcactctgat ctctgactgc agctcctact gttggacaca cctggccggt A
gcttcagtta gatcaacca ttgtgaaac tgaaggagac atgtcaata ttacagatcc
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463	152299 Interleukin-8 Receptor A	NP_000625.1	acaggaatga atgcatgctg aaaaagaccac tctttt DFDDLNFTGM PPADEDYSPC MLETETLNKY VVIAAYALVF LLSLLGNSLV P MLVILYSRVG RSVTDVYLLN LALADLLFAL TPIWAASKV NGWIFGTFLC KVVSLKEVN FYSGILLAC ISVDRYLAIV HATRTLQKR HLKFEVCLGC WGLSMNLSLP FFLFRQAYHP NNSPVCYEV LGNDTAKWRM VLRIPLHTFG FIVPLFMLE CYGFTLRTL F KAHMGQKHRA MRVIFAVVLI FLLCWLPYNL VLLADTLMRT QVIOESCERR NNIGRALDAT EILGFLHSL NP1IYAFIGQ NFRHGFLKIL AMHGLVSKEF LARHRTSYT SSSVNVSSNL	Homo sapiens
464	158822 Mas Proto-Oncogene	NM_002377	cctgagcct cctcatgcat gggtaaacg tgacatcat tgttgtgag acatctcaac tggcaggaa gctcagtcg ggaatgcaca tggcaaatc cccatcgtgc actgggtcat tatgagcat tccccagtg ggttgttga gaattggatt ctcctctggt tctgtgctt ccgcatgaga agaaatccct tcaactgtcta catcacccac ctgtctatcg cagacatctc actgctcttc tgtattttca tcttgtctat cgaactatgct ttagattatg agctttcttc tggccattac tacacaattg tcacattatc agtgactttt ctgtttggtc acaacacggg cctctatctg ctgacggcca ttagtgtgga gagggtgctg tcagtcctt acccatctg gtaccgatg catgccccca agtaccagtc ggcattggtc tgtgcccttc tgtgggtctt ttcttgctg gtgaccacca tggagtatgt catgtgcatc gacagagaag aagagagtca ctctcggaat gactgcccag cagtcacatc ctttatagcc atcctgagct tctgtgctt caccgcccct atgctggtg ccagcaccat ctgtgctg aagatccgga agaacacgtg ggttcccat tctcccaagc ttacatagt catcatggc accatcata tattctcat ctctgctatg cccatgagac tctttacct gctgtactat gagtattggt cgacctttg gaacctacac cacatttccc tgccttctc caaatcaac agtagcgcca acctttcat ttacttctt gtgggaagca gtaagaagaa gagattcaag gagtccctaa aagttgtct gaccagggt tcaaaagatg aaatgcaacc tggcgccag aaagacaatt gtaatacggc cagagttg actgtcgtc agaaactgt aggaagtgt tggataaaaa tggtggaaca caggtcatt ttagtttgt ctggaatat gacttaagta tctcctaaat gtgatacaga agaactatc atcccatatg catgagatc taattaatga tga MDGSNVTsfV VEEPTNISTG RNASVGNHR QIPVHWIM SISPVGFVEN GILLWFLCFR P MRNPFTVYI THLSIADISL LFCIFILSID YALDYELSSG HYTIVTISV TFLFGYNTGL YLLTAISVER CLSVLYPIWY RCHRPKYQSA LVCALLWALS CLVTMEYVM CIDREESH RNDGRAVIF IAILSFLVFT PLMLVSTIL VKIRKNTWA SHSKLYIVI MVTIIIFLIF AMPMLLYLL YYEYWSFTGN LHHISLLFST INSSANPFY FFGSSKKR FKESLKVL RAFKDEMQR RQKDNCTVT VETV	Homo sapiens
465	158822 Mas Proto-Oncogene	NP_002368.1	atgctgccg actggaagag ctctctgcat ctcattgctt acatcatcat cttcctcact A ggctccctg ccaacctct ggccctgag gctttgtg ggcgatccg ccagcccg cctgacactg tgcacatct cctgctgagc ctgacgtg cgaacctct cctgctgctg ctgctgccct tcaagatcat cgaggctgc tcgaacttc gctggtacct gcccaaggtc gtctgcccc tcacgagttt tggctctac agcagcatc actgcagcac gtggctcctg gcgggcatca gcatcgagc ctacctgga gtggcttcc cgtgcagta caagctctc cgccggctc tgtatggagt gattgcagt ctggtggctt ggttatgtc ctttggtcac tgcaccatc tgatcatcgt tcaatacttg aacacgactg agcaggtcag aagtggcaat	Homo sapiens
466	159152 G Protein-Coupled Receptor GPR43	NM_005306		Homo sapiens

467	159152 G Protein- Coupled Receptor GPR43	NP_005297.1	<p>gaaattacct gctacagagaa cttcaccgat aaccagttgg acgtggtgct gcccgtgctg</p> <p>ctggagctgt gcctggtgct cttcttcac ccatggcag ccagagggcg gcgcccagcc</p> <p>cgttttgtgt ggatcatgct ctccagccc ttctgtgggt gcttcggtg ttacaacgtg</p> <p>gtggggctgg ctgtggtgac gctgctcaat agcccctggt ggcggtcaat agccgtggtg</p> <p>tcccacctgg tggggtatca ccagagaaaa agcccctggt gctctcttct attctcttc ttcagtgggtg</p> <p>ttcagttcac tcaacgccag cctggacccc ctgctcttct attctcttc ttcagtgggtg</p> <p>cgagggcat ttgggagagg gctgcaggtg ctgcggaatc agggctcctc cctgttggga</p> <p>cgagaggca agacacagc agaggggaca aatgaggaca ggggtgtggg tcaaggagaa</p> <p>gggatgcaaa gttcggactt cactacagag tag</p> <p>LLPFKIIIEA SNFRWYLPKV LMAYIIIFLT GLPANLLALR AFVGRIRQPQ PAPVHILLLS LTIADLILL P</p> <p>RRPLYGVIAA LVAWMSFGH CTIVIIIVQYL VCAITSGFY SSIYCSTWLL AGISIERYLG VAFPVQYKLS</p> <p>LELCILVFFI PMAVTIFCYW RFWMILSQP LVGAQRRRRR VGLAVVTILN FLVCFGPYNV</p> <p>SHLVGYHQRK SPWRSIAV FSSLNASLDP LLFYFSSSVV RRAFGRGLQV LRNQSSLLG</p> <p>RRGKDTAEGT NEDRGVQGE GMPSSDFTTE</p>	Homo sapiens
468	159973 Vasoactive Intestinal Polypeptide Receptor 1	NM_004624	<p>ggccacaggc cagcgccact ctgccaggct cccggccatc gccggcctgg tgcgcccgc</p> <p>gccagctctt tgcccgcgcg gggccgcccgc ccgcgggctc agggcagacc atgcgcccgc</p> <p>caagtccgct gccgcgcgcg tggctatgcg tgctggcagg cgccctgcgc tgggcccctg</p> <p>ggccggcggg cgccagggcg gccaggctgc aggaggagtg tgaatatgtg cagatgatcg</p> <p>aggtgcagca caagcagtg cggaggagg ccagctgga gaatgagaca ataggctgca</p> <p>gcaagatgtg ggacaacctc acctgctggc cagccacccc tggggggcag gtagttgtct</p> <p>tggcctgtcc cctcatcttc aagctcttct cctccattca aggcgccaat gtaagccgca</p> <p>gctgcaccga cgaaggctgg acgcacctgg agcctggccc gtacccatt gcctgtgggt</p> <p>tggatgacaa ggcagcagat ttggatgagc agcagacctt gttctacggt tctgtgaaga</p> <p>ccggctacac cattggctac ggcctgtccc tgcgccacct tctggtcgccc acagctatcc</p> <p>tgagcctgtt caggaagctc cactgcacgc ggaactacat ccacatgcac ctcttcatat</p> <p>ccttcacctt gagggtgcc gctgtcttca tcaaagactt ggccctcttc gacagcggg</p> <p>agtcggacca gtgctccgag ggctcgggtg gctgtaaggc agccatggtc ttttccaat</p> <p>attgtgtcat ggtaacctc ttctggctgc tggtgagggg cctctacctg tacacctgc</p> <p>ttgccgtctc cttcttctct gagcggaagt acttctgggg gtacatactc atcggtggg</p> <p>gggtacccag caccatcac atggtgtgga ccatcgccag gatccatttt gaggtattg</p> <p>gggtctggga caccatcac tctcactgt ggtggatcat aaaggggccc atcctcacct</p> <p>ccatcttggg aaacttcac ctgtttattt gcatactcc aatcctgctt cagaaactgc</p> <p>ggccccaga tatcaggaag agtgacagca gtccatactc agggtagcc aggtccacac</p> <p>tcctgctgat cccctgttt ggagtacact acatcatgtt gccttctttt ccgacaactt</p> <p>ttaagcctga agtgaagatg gtctttgagc tgcgtgtggg gtctttccag ggttttggg</p> <p>tggtatcct ctactgttc ctcaatgggt aggtgcaggc ggaagtggag cggaagtggc</p> <p>ggcgtggca cctgcaggc gtctggggt ggaaccccaa ataccggcac ccgtcgggag</p> <p>gcagcaacgg cgccacgtgc agcacgaggt ttccatgct gaccgcgtc agccagggtg</p> <p>ccgcccgtc ctccagctc caagccgaag tctccctggt ctgaccacca ggateccagg</p> <p>ggcccaaggc ggcccctccc gcccttccc actcaccccc gacagcggcg gggacagagg</p>	Homo sapiens

469	159973 Vasoactive Intestinal Polypeptide Receptor 1	NP_004615.2	<p>cctgccccg cgggcccagc cccggccctg ggctcggagg ctgcccccg cccctggtc</p> <p>tctggtccg acactcctag agaacgcagc cctagagcct gctggagcg tttctagcaa</p> <p>gtgagagaga tgggagctcc tctcctggag gattgcaggt ggaactcagt cctagactc</p> <p>ctctccaaa ggcctccctac gccaatcaag ggcataaagt ctacatactt tcatectgac</p> <p>tctgccccct gctggctctt ctgcccattt ggaggaagc aacgggtgga tctcaaaa</p> <p>acactgggtg gacctgaggg cagaaaagtt ctgccccggg aaggtcacca gcaccaaac</p> <p>cacggtagtg cctgaaattt caccattgct gtaagttcc ttgggttaa gcattaccac</p> <p>tcaggcattt gactgaagat gcagctcact accctattct ctcttacgc ttagttatca</p> <p>gctttttaa gtgggttatt ctggagttt tgttggaga gcacacctat cttagtggtt</p> <p>ccccaccgaa gtggactggc cctgggttca gctgggtggc agacgggtgc aacccaaaga</p> <p>ctgagggact ctgaagcctc tgggaaatga gaaggcagcc accagcgaat gctaggtctc</p> <p>ggactaaagg tactgtctct ccaagtctca gtggcttcat ctgtcaagtg gcatctgtca</p> <p>caccagccat acttatctct ctgtgctgtg gaagcaacag gaatcaagag ctgccccct</p> <p>tgtccacca cctatgtgcc aactgttcta actaggttca gagatgtgca cccatgggct</p> <p>ctgacagaaa gcagatacct caccctgcta cacatacagg atttgaactc agatctgtct</p> <p>gataggaaat gaaagcacg gactcttact gctaaactttt gtgtatccta accagccaga</p> <p>tcctcttggt tatttgttta ccaattgtat tattaatgcc ttatctctga attccccctg</p> <p>ccacccacc ctccctggcg tgtggctgag gaggcctcca tctcatgtat catctggata</p> <p>ggagcctgct ggtcacagcc tctctgtct gcccttacc ccagtggcca ctacgcttc</p> <p>taccacacc tctgccagaa gatccccca gactgcaac aggttgtgac aacaataaat</p> <p>gttgcttgga a</p>	Homo sapiens
470	160040 Vasoactive Intestinal Polypeptide Receptor 2	NM_003382	<p>cgggacgagg ggccggcccc cgcgctcggg cgcctcggct acagctgcgg ggcctgaggt A</p> <p>ctccgcgac tgcgtcccg cccatgctgg agcgcgagg acccggggga cctagagcgg</p> <p>aggcgcgagg cgtggggcg ccccgccac gctgagctcg ggtgcggac gctgctgcct</p> <p>cccgcgctgc tgacctgctg gctgctcgc cccgtgaaca gattcaccc agaattgcga</p> <p>tttcatctgg aatacagga ggaagaaaca aaatgtacag agcttctgag gtctcaaaa</p> <p>gaaaaacaca agcctgagga tggcgctcgg gacaacatca cgtgctggcg gctgccaat</p> <p>gtgggagaga ccgtcacgggt gccctgcccc aaagtcttca gcaattttta cagcaaaaga</p> <p>gaaacataa gcaaaaactg tacgagtgc ggaatttcag agacgttccc agatttcgtc</p> <p>gatgcctgtg gctacagcga cccggaggat gagagcaaga tcacgtttta tattctgtg</p> <p>aaggccattt atacctggg ctacagtgc tctctgatgt ctcttgcaac aggaagcata</p> <p>attctgtgct tcttcaggaa gctgcaactg accaggaatt acatccacct gaacctgttc</p> <p>ctgtccttca tcttgagagc catctcagtg ctggtcaagg acgacgttct ctactccagc</p>	Homo sapiens

471	160040	Vasoactive Intestinal Polypeptide Receptor 2	NP_003373.1	<p>tctggcacgt tgcactgccc tgaccagcca tctctctggg tgggctgcaa gctgagcctg gtcttctctgc agtactgcat catggccaac ttcttctggc tcttctctgga ggggctctac ctccacaccc tcttggtggc catgtctccc cctagaaggt gcttctggc ctacctctg atcgatggg gctctcccac cgtctgcac ggtcgtgga ctggggccag gctctactta gaagacaccc gttgctggga tacaaacgac cacagtgcg cctggtgggt catacgaata ccgattttaa ttcccatcat cgtcaatttt gtccttttc ttagtattat acgaattttg ctgcagaagt taacatcccc agatgtcggc ggcaacgacc agtctcagta caagaggctg gccaagtcca cgtctctgct tatcccgctg ttggcgctcc actacatggt gtttgccctg tttcccatca gcattctctc caaataccag atactgtttg agctgtgctt cgggtcgttc cagggcctgg tgggtggcgt cctctactgt ttcttgaaca gtgaggtgca gtgcagctg aagcgaataat ggcaagccg gtgcccggacc cgtcccgga gccgggatta cagggtctgc ggttctctct tctccacaa cggctcggag ggcccgctgc agttccaccg cgcgtcccca gcccagtcct tctgcaaac ggagacctgc gtcatctagc cccaccctg cctgtcggac gaggcgagg gcccacggtt cggggcttct gggggctga gacggcggct tctctcttc agatgcccga gcaccgtgc gggcaggtca ggcgggtcct gactccgtca agctggttgt ccactaaacc ccatacctgg</p>	<p>Homosapiens</p>
472	160055	Motilin Receptor (GPR38)	NM_001507	<p>atgggcagcc cctggaacgg cagcgacggc cccgaggggg cgcgggagcc gccgtggccc A gcgtgcgcg cttgcgacga gcgcgctgc tgcctcttc cctggggggc gctggtgcg gtgaccgctg tgtgctgtg cctgttcgtc gtcggggtga gcggcaacgt ggtgaccgtg atgctgatcg ggcgtaccc ggacatgcgg accaccacca acttgacct gggcagcatg gccgtgtccg acctactcat cctgctcggg ctgcgcttcg acctgtaccg cctctggcgc tcggggccct ggtgttcgg ggcgtgctc tgcgcctgt cctctacgt gggcgagggc tgacacctag ccacgtgct gcacatgacc gcgtcagcg tcgagcgcta cctggccatc tgccgcccgc tccggcccgc cgtcttggtc accggcgcc ggtcccgcg gctcatcgct gtgctctggg ccgtggcgt gctctctgcc ggtcccttct tgttctggt gggcgtcgag caggacccc gcatctcct agtcccggc ctcaatggca ccgcgcggat cgcctctctg cctctgctc cgtgcgcgc tctctggtc tgcggggcg caccgcccgc cccgcccgtc ggggcccgaga ccggggaggc cgcggcgctg ttacggcgcg aatgccggc gaggcccgcg cagctggggc cgtgctgctg catgctgtgg gtcaccacc cctacttctt cctgcccctt ctgtgcctca gcattctcta cgggctcctc gggcgggagc tgtggagcag ccggcgccgc ctgcgagggc cggccgcctc gggcggggag agaggccacc ggagaccgt ccgcgtcctg ctgggtggtg tcttgccatt tataattgc tgggtgcct tccacgttgg cagaatcatt tacataaaca cgggaagattc gcggatgatg tacttctctc agtactttaa categtcgt</p>	<p>Homosapiens</p>

473	160055	Motilin Receptor (GPR38)	NP_001498.1	ctgcaacttt tctatctgag cgcattatc aaccaatcc tctacaacct cattcaaaag aagtacagag cggcgccctt taaactgctg ctcgcaagga agtcaggcc gagaggcttc cacagaagca gggacactgc ggggaaggtt gcaggggaca ctggaggaga cacggtgggc tacaccgaga caagcgtaa cgtgaagacg atgggataa MLIGRYRDMR TTTNLYLGS AVSDLLILG SPFDLGLV SRPWVFGPLL CRSLYVGE CTYATLLHMT ALSVERYLAI CRPLRARVL TRRRVRLIA VMAVALISA GFPLFLVGE QDPGISVPG INGTARIASS PLASSPPLWL SRAPPPSPS GPETAEEAAL FSRECRPSA QLGALRVMLW VTTAYFFLFF LCLSLYGLI GRELWSSRP LRGPAAAGRE RGHRTVRVL LVVLAFIIC WLPFHVGRII YINTEDSRM YFSQYFNIVA LQLFYLSASI NPILYNLISK KYRAAAFKLL LARKSRPRGF HRSRDTAGEV AGDTGGDTVG YTETSANVKT MG atggacctgc ccccgacgct ctccttcggc ctcctatgtg cgcgctttgc gctgggcttc A cgcctcaacg tccgtggcat ccgaggcgcg acggcccacg cccggctccg tctcaccct agcctggctc agcccttgaa cctgggctgc tccgacctgc tgctgacagt ctctctgcc ctgaaggcgg tggaggcgt agctccggg gctggcctc tatggcctc gctgtgccc gtcttcggg tggccactt ctccacctc cctggcgtc cctgggctc ggcggcctg agtgacggc gctacctggg agcagcctc ccttgggct accaagcctt cggaggcgg tgctattcct ggggggtgtg cgcggccatc tgggcccctc tctgtgtca cctgggtctg gtctttgggt tggaggctcc agaggctgg ctggaccaca gcaacacctc cctgggcatc aacacacccg tcaacggctc tccggtctg ctggaggcct gggaccggc ctctgccc cggcccgtc tccgctctc tctcctgctc tttttctgc ccttgccat cacagcctc tgctacgtg gctgctccg ggcactggc cgtccggc tgacgcacag gcggaagctg cggccgctt ggtggcccg cgggcccctc ctaacgtgc tgctctgct aggacctac aacgcctcca acgtggccag ctctcctgac ccaactctag gaggctcctg gcggaagctg gggctcatca cgggtgctg ggtgtggtg cttaactccg tggtgacgg ttaactggga agggtctctg gctgaagac agtgtgtg gcaagaacgc aggggggcaa gtcccagaag taa	Homo sapiens
474	160059	G Protein- coupled Receptor GPR40	NM_005303	atggacctgc ccccgacgct ctccttcggc ctcctatgtg cgcgctttgc gctgggcttc A cgcctcaacg tccgtggcat ccgaggcgcg acggcccacg cccggctccg tctcaccct agcctggctc agcccttgaa cctgggctgc tccgacctgc tgctgacagt ctctctgcc ctgaaggcgg tggaggcgt agctccggg gctggcctc tatggcctc gctgtgccc gtcttcggg tggccactt ctccacctc cctggcgtc cctgggctc ggcggcctg agtgacggc gctacctggg agcagcctc ccttgggct accaagcctt cggaggcgg tgctattcct ggggggtgtg cgcggccatc tgggcccctc tctgtgtca cctgggtctg gtctttgggt tggaggctcc agaggctgg ctggaccaca gcaacacctc cctgggcatc aacacacccg tcaacggctc tccggtctg ctggaggcct gggaccggc ctctgccc cggcccgtc tccgctctc tctcctgctc tttttctgc ccttgccat cacagcctc tgctacgtg gctgctccg ggcactggc cgtccggc tgacgcacag gcggaagctg cggccgctt ggtggcccg cgggcccctc ctaacgtgc tgctctgct aggacctac aacgcctcca acgtggccag ctctcctgac ccaactctag gaggctcctg gcggaagctg gggctcatca cgggtgctg ggtgtggtg cttaactccg tggtgacgg ttaactggga agggtctctg gctgaagac agtgtgtg gcaagaacgc aggggggcaa gtcccagaag taa	Homo sapiens
475	160059	G Protein- coupled Receptor GPR40	NP_005294.1	MDLPPQLSFG LYVAAFALGF PLNVLAIRGA TAHARLRLTP SLVYALNLGC SDLLTVSLP P LKAVEALASG AMPLPASLCP VFVAHFFPL YAGGFLAAL SAGRYLGAFF PLGYQAFRRP CYSWGVCAL WLVLCCHLGL VFGLEAPGGW LDHSNTSLGI NTPVNGSPVC LEAWDPASAG PARFSLSLLL FFLPLAITAF CYVGLRALA RSLTHRRKL RAAWVAGGAL LTLILCVGPY NASNVASFLY PNLGGSWRKL GLITGMSVV LNPLVTGYLG RGPGLKTVC AARTQGGKSQK atgcacaccc tggctacgtc cggaccacac cgtctctggg gggcaccggc caagcctcc A ggctgcccgg gctgtggcgc caacgcctcg gacggcccag tccctcgcc gcgggccgtg gacgctggc tctgtggcgt ctcttcgcg gcgctgatgc tgctgggctt ggtggggaac tcgctggta tctacgtcat ctgcccacac agccgatgc ggaccgtgac caactctac atcgccaacc tggcgccac ggacgtgacc tctctctgt gctgctccc ctccagggc ctgctgtacc cgtgcccgg ctgggtgctg ggcacttca tgtgcaagt cgtcaactac atccagcagg tctcggtgca ggccactgt gccactctga ccgcatgag tgtggaccgc tggtacgtga cgggttccc gttgcgccc ctgaccgcc gcacgccc cctggcgctg gctgtcagcc tcaagcatctg gtaggctct gcgcggtgt ctgcccgtg gctgcccctg	Homo sapiens
476	160189	G Protein- Coupled Receptor GPR54	NM_032551	atgcacaccc tggctacgtc cggaccacac cgtctctggg gggcaccggc caagcctcc A ggctgcccgg gctgtggcgc caacgcctcg gacggcccag tccctcgcc gcgggccgtg gacgctggc tctgtggcgt ctcttcgcg gcgctgatgc tgctgggctt ggtggggaac tcgctggta tctacgtcat ctgcccacac agccgatgc ggaccgtgac caactctac atcgccaacc tggcgccac ggacgtgacc tctctctgt gctgctccc ctccagggc ctgctgtacc cgtgcccgg ctgggtgctg ggcacttca tgtgcaagt cgtcaactac atccagcagg tctcggtgca ggccactgt gccactctga ccgcatgag tgtggaccgc tggtacgtga cgggttccc gttgcgccc ctgaccgcc gcacgccc cctggcgctg gctgtcagcc tcaagcatctg gtaggctct gcgcggtgt ctgcccgtg gctgcccctg	Homo sapiens

477	160189 G Protein-Coupled Receptor GPR54	NP_115940.1	<p>caccgcctgt caccggggcc gcgcgcctac tgcagtgagg ccttccccag ccgcgcctgtg gagcgcct tgcactgt caacctgtg gcgctgtacc tgcgtccgct gctgccacc tgcgcctgt atgcggccat gctgcgcac gctggccggg tgcgcctg cccgcgccc gccgatagc cctgcagg gcagtgctg gcagagcg gcagcgcgt ggcggccaa gctcgcggc tggggggc cgtggctctg ctcttcgcg cctgctggg cccatccag ctgttctgg tgcgcagg gctggggccc gctgctctt ggacccacg cagctacgc gcctacg gc ttaagacctg ggtcactgc atgtectaca gcaactccg gctgaacccg ctgctctac ccttccctgg ctgcacttc cgacaggct tccgcgcgt ctgcccctgc gcgcgcgc ccccccgcg ccccccgcg ccccccgcg gggcgagaa gccaggagc agtgggctg ccgcgcgcg gctgcgcg gctgtgctc ctgggggag acaacgccc tctctga</p> <p>SILVIYICRH KPMRTVTNFI IANLAATDVT FLCCVPFTA LLYPLPGWVL GDFMCKFVNY IQQSVQATC ATLTAMSVDR WYVTFPLRA LHRRTPLAL AVSLSIWVGS AAVSAPVLAL HRLSPGPRAY CSEAFPSRAL ERAFALYNLL ALYLLPLLAT CACYAAMLRH LGRVAVRPAP ADSALQGQVL AERAGAVRAK VSRLVAHV LFAACWGP IQ LFLVLQALP AGSWHPRSYA AYALKTWAHC MSYSNSALNP LLYAFLGSHF RQAFRRVPCP APRRRRPRR PGPSPDPAAPH AELHRLGSHP APARAQKPGS SGLAARGLCV LGEDNAPL</p>	Homo sapiens
478	160202 Adrenomedullin Receptor (ADMR)	LG6564	<p>CCGGCGCCAC GTGCCTGCTG CTGCGCGCCT ACCTGACGGC GCATTGTTCAT GCACTGGCTG A ACCTATCATG AGACCTGCTT CTTGTCTACA CTGTATGGA CCCACATCTG CCTACACTGC CACTGGTAC CAACCTGCTT ACTTCTTCTA TGATGTCTG TACTGTCTG GCGGGCTGG ACTGCGCTAT TCACCGGATC CTTGACAACT TTATCAGCCA GACTGCCGGG CTCCTCTTCC ATGCTGTGGT CCATTACTTG CTAAGGACCA GACCGCGGGG GCACATGCGC TGCTGGAGC TTCTGTGACA CCCAGCGTTA CATAATCATT ACCACGGGTG ATAGCCAGAC TGCTGGAGC AACCGGCCAC CTTGCAGCCA AGCCTGAGCT TTCAGGCCA CCATTCGCTC GCAAAGACTT GCGCCATGTG TCCCACTCAG TGTCTTACAC CCAGCTGAGG T</p>	Homo sapiens
479	160202 Adrenomedullin Receptor (ADMR)	NM_007264	<p>cagcctctc acagctcccc atagcctgga cctgcccggc ctcctccag gaccgaggg A ctcccaagg aaactcaggc gtgtgctggt cccaatgtca gtgaaaccca gctgggggccc tggcccctc gagggggtca ccgcagtgc taccagtgc cttggagaga tccacaactg gaccgagct cttgacctc tcaaccacac tttgtctgag tgcacagtgc agctcagcca gagcaccaag cgcgtggtcc tctttgccc ctacctggc atgtttgtgg ttgggctggt ggagaacctc ctggtgat at gcgtcaactg gcgcggctca ggcggggcag gctgatgaa cctctacatc ctcaacatgg ccatcgcgga cctgggcat gtctgtctc tgcctgtgt gatgctggag gtcacgtgg actacacctg gctctggggc agcttctct cccgcttcac tcaactactc tactttgtca acatgtatag cagcatctc tctctggtgt gctcagttg cgaccgctat gtcacctca ccagcgcctc cccctcctgg cagcgttacc agcaccagat gcggcgggcc atgtgtgca gcatctgggt cctctcgccc atcatccgc tgcctgaggt ggtccacatc cagctgggtg agggccctga gccatgtgc ctcttcattg cacttttga aacgtacagc acctggggccc tggcggtggc cctgtccacc acctcctg gcttccctgt gcttccctgct gcccttccct ctcatcacag tcttcaatgt cctgacagcc tgcgggctgc ggcagccag gcccttccct agcggggccc actgcttgc tgcgtggccc tacgtggccc tctttgtcat</p>	Homo sapiens

480	160202 Adrenomedullin NP_009195.1 in Receptor (ADMR)	gtgctggctg ccctatcatg tgacctctgct gctgctcaca ctgcatggga cccacatctc cctccactgc cacttggtcc acctgctcta ctctctctat gatgtcattg actgttcttc catgctgcac tgtgtcatca ccccatcct ttacaacttt ctacagccac acttccgggg cggctcctg aatgctgtag tccattacct tccaaaggac cagaccaagg cggcacatg cgctcctct tcctcctgtt ccaccagca ttccatcatc atcaccagg gtgatagcca gctgctgca gcagccccc acctgagcc aagcctgagc ttccaggcac accttctgct tccaaatact tcccctatct ctcccactca gcctcttaca cccagctgag gta LAMEFVGLVE NLLVICNWR GSGRAGLNNL YILNMAIADL GIVLSLPVWM LEVTDYTWL WGSFSCRFTH YFYFVNMYS IFFLVCLSDV RYVTLTASP SWQRYQHRVR RAMCAGIWWL SAIIPLEW HIQLVEGPER MCLFMAPFET YSTWALAVAL STTILGFLP FLITVFNVL TACRLRQPGQ PKRRHCLLL CAYVAVFVNC WLPYHVTLLL LTLHGTHISL HCHLVHLLYF FYDVIDCFSM LHCVINPILY NELSPEHGR LLNAVWHYLP KDQTKAGTCA SSSCSTQHS IIITKGDSP AAAAPHPEPS LSFQAHLLP NTSPISPTQP LTPS atgcgggttc tgcttccaaa gccatctctt ccagcaggag agggctctac tctgagctcc A tatttccaa ggctccgggc cgcctcctgc cctggcctgc tgccccggcg ggtccggcg ccggaaggcg gagtcacagg aagagccctc cacaacaggga ggctcggcg gatcaggaca gctgcagggt ggtgtgcaga ctggtgagct gccagcagg gccagacgc gccaggcctg gagatggctg gaaactgctc ctgggagggc catcccggca acaggaacag gatgtgccct ggcctgagcg agggcccgga actctacagc cggggcttcc tgaccatcga gcagatcgcg atgctgcgc ctccggcct catgaactac atcttctgc tctctgctt gtgtggcctg gtgggcaacg gctgggtct ctggttttct ggttcttcca tcaagaggaa ccccttctcc atctacttcc tgacctggc cagcgcgat gtgggctacc tcttcagcaa ggcggtgttc tccatcctga acagggggg ctctctgggc aggtttgccc actacatccg cagcgtgtgc cgggtcctgg gctctgcat gttccttacc ggcgtgagcc tcttcggcg cgtcagcgcc gagcgtgcg cctcggtcat ctctcccgcc tggtagtggc gccggggcg caagcgcctg tcggccgtgg tgtgcgccc gctgtgggtc ctgtccctcc tggtagcctg cctgcacaa tacttctgc ttttcttgg ccggggggcc ccggcgcgcc cctgcaggca catggacatc ttcctgggca tctcctgtt cctgctctgc tgcccgtca tgggtctgcc ctgctggcc ctcatcctgc acgtggagt ccggggccga cggcgccagc gctctgcaa gctcaaccac gtcatcctgg ccatggtct cgtcttctg gtgtcttcca tctactagg gatcgactgg ttcctcttct ggtcttcca gatccggcc ccttccccc agtagctcac tgacctgtgc atctgcatca acagcagcg caagcccatc gtctacttcc tggccggag ggacaagtgc cagcggctgt gggagccgct cagggtgttc tccagcggg ccttcggga cggcgtgag ctgggggaggg ccggggggcag cagcccaac acagtacca tggagatgca gtgtccccc gggaacgcct cctgagact cagcgcctgg agaggcagg ggcaggagc ggcctccaa accttgcgc ttgggacagg aatgggcacc tgcttctgag tccatacagg agaagaaaga tctgttctct ctctcgggc ctcttctcc ctgggctggg gactccagg gtggctggga gactgggag ccaccagcaa acagacctgt ggcctcctg cggctcccc accttctg ctccctaga gactcttgt acagaagtgt ccccgaggtg gtggggccc tcttgcct aggctggtg gtaaaagaga ggaggtcaac accagccta gccactctg cctctgggt	Homo sapiens
481	160204 G Protein-Coupled Receptor RTA	gtgctggctg ccctatcatg tgacctctgct gctgctcaca ctgcatggga cccacatctc cctccactgc cacttggtcc acctgctcta ctctctctat gatgtcattg actgttcttc catgctgcac tgtgtcatca ccccatcct ttacaacttt ctacagccac acttccgggg cggctcctg aatgctgtag tccattacct tccaaaggac cagaccaagg cggcacatg cgctcctct tcctcctgtt ccaccagca ttccatcatc atcaccagg gtgatagcca gctgctgca gcagccccc acctgagcc aagcctgagc ttccaggcac accttctgct tccaaatact tcccctatct ctcccactca gcctcttaca cccagctgag gta LAMEFVGLVE NLLVICNWR GSGRAGLNNL YILNMAIADL GIVLSLPVWM LEVTDYTWL WGSFSCRFTH YFYFVNMYS IFFLVCLSDV RYVTLTASP SWQRYQHRVR RAMCAGIWWL SAIIPLEW HIQLVEGPER MCLFMAPFET YSTWALAVAL STTILGFLP FLITVFNVL TACRLRQPGQ PKRRHCLLL CAYVAVFVNC WLPYHVTLLL LTLHGTHISL HCHLVHLLYF FYDVIDCFSM LHCVINPILY NELSPEHGR LLNAVWHYLP KDQTKAGTCA SSSCSTQHS IIITKGDSP AAAAPHPEPS LSFQAHLLP NTSPISPTQP LTPS atgcgggttc tgcttccaaa gccatctctt ccagcaggag agggctctac tctgagctcc A tatttccaa ggctccgggc cgcctcctgc cctggcctgc tgccccggcg ggtccggcg ccggaaggcg gagtcacagg aagagccctc cacaacaggga ggctcggcg gatcaggaca gctgcagggt ggtgtgcaga ctggtgagct gccagcagg gccagacgc gccaggcctg gagatggctg gaaactgctc ctgggagggc catcccggca acaggaacag gatgtgccct ggcctgagcg agggcccgga actctacagc cggggcttcc tgaccatcga gcagatcgcg atgctgcgc ctccggcct catgaactac atcttctgc tctctgctt gtgtggcctg gtgggcaacg gctgggtct ctggttttct ggttcttcca tcaagaggaa ccccttctcc atctacttcc tgacctggc cagcgcgat gtgggctacc tcttcagcaa ggcggtgttc tccatcctga acagggggg ctctctgggc aggtttgccc actacatccg cagcgtgtgc cgggtcctgg gctctgcat gttccttacc ggcgtgagcc tcttcggcg cgtcagcgcc gagcgtgcg cctcggtcat ctctcccgcc tggtagtggc gccggggcg caagcgcctg tcggccgtgg tgtgcgccc gctgtgggtc ctgtccctcc tggtagcctg cctgcacaa tacttctgc ttttcttgg ccggggggcc ccggcgcgcc cctgcaggca catggacatc ttcctgggca tctcctgtt cctgctctgc tgcccgtca tgggtctgcc ctgctggcc ctcatcctgc acgtggagt ccggggccga cggcgccagc gctctgcaa gctcaaccac gtcatcctgg ccatggtct cgtcttctg gtgtcttcca tctactagg gatcgactgg ttcctcttct ggtcttcca gatccggcc ccttccccc agtagctcac tgacctgtgc atctgcatca acagcagcg caagcccatc gtctacttcc tggccggag ggacaagtgc cagcggctgt gggagccgct cagggtgttc tccagcggg ccttcggga cggcgtgag ctgggggaggg ccggggggcag cagcccaac acagtacca tggagatgca gtgtccccc gggaacgcct cctgagact cagcgcctgg agaggcagg ggcaggagc ggcctccaa accttgcgc ttgggacagg aatgggcacc tgcttctgag tccatacagg agaagaaaga tctgttctct ctctcgggc ctcttctcc ctgggctggg gactccagg gtggctggga gactgggag ccaccagcaa acagacctgt ggcctcctg cggctcccc accttctg ctccctaga gactcttgt acagaagtgt ccccgaggtg gtggggccc tcttgcct aggctggtg gtaaaagaga ggaggtcaac accagccta gccactctg cctctgggt	Homo sapiens

482	160204 G Protein- Coupled Receptor RTA	CAC39840.1	<p>cagccctcct tgactgtgtc ccagccagca ccaggccagc agcctcatcc ctgcccattca gggctgttcc agagattcga tccctttaag gcattatcag tgagcaaatg tgaaggaaat gggtgtctgga agaaagtctt ggttcacatg cctgttagct aagcttttct gcaacaaccc tcccttcccc ccgtcagtc atttggtgac ttgtggtggg ggattttctg ttatgtcaag gctctggaga caggaaagggc ctgtggccgc ctgtgtagt tgacctgctt ttctgactc cggaacgagc cagtcctagg ctgcctccgc ggcacttga ggtatccgc aggccatgag gaccactgg gcagctcctg gacagcctct tggctccagc cccaccgcg aagtggcac tggtcccgcc ctggccacct gggactggc actgtggtgc acagtggccc aatgtggcca acggaagttt tataaagac aaaatgata tcaataaaca tttataact tgc MAGNCSWEAH PGNRNMCPG LSEAPELYSR GFLTIEQIAM LPPAVMNYI FLLCLCGLV P GNGLVWFFG FSIKRNPFESI YFLHLASADV GYLFSKAVES ILNTGGFLGT FADYIRSVCR VLGLCMFLTG VSLPVAWSAE RCASVIFPAW YWRRRPKRLS AVVCALLWVL SLVVTCLHNY FCVFLGRGAP GAACRHMDF LGILLFLCC PLMVLPLCLAL ILHVECRARR RQSAKLNHV ILAMVSVFLV SSIYLGIDWF LEWVFQIPAP FPEYVTDLCI CINSSAKPIV YFLAGRDKSQ RLWEPLRVVF QRALRDGAEL GEAGGSTPNT VTMEMQCPPG NAS</p> <p>atgaatgggg tctcgaggg gaccagaggc tgcagtgaaca ggcaacctgg ggtcctgaca A cgtgatcgct ctgttccag gaagatgaac tcttccggat gctgtctga ggaggtgggg tccctccgc cactgactgt ggttatectg tctgcgtcca ttgtctcgg agtgcgtggc aatgggctgg tgctgtggat gactgtctc cgatttcag ctctcactgt ctctgcccac catcacctt ttcttccacc tggcccttgc gacttccgga gactgggccc tctctgtct tcatctctgt ggacctgtg tatattgtct ccaggcagtg gctcctcggc agtaactgc ctctgtctt accaactcta catcacctt gtgttctca gctacttgc ctggaactgc ctctgtctt accaactcta catcacctt atctctgtcc tctacccctg ctgggcccgt aaccaccga ctgtgagcg ggcgagctgg ctggcccttg ggggtggct cctggccgct gctgtgtgt cctgcacct gaaattcccg acaaccagaa aatggaatgg ctgtacgac aggggtcgt gagggacaca ttataggagc cattggccac actgcccaga ttggattga aggggtcgt gacttagca atcataggca cctgcgcca cctcatccg ttcctgctgg gcttctggg ccttctggc ctgggtccat gcaaccggc ccaagaggct gctgctggg gccaaactct tgcgggagg ctctctttat cctctggtcc cagtttaacg tgggtgctgt ggtccatctg ctggtgagcg ctctctttat ggaatctac caccctcgg tctgtctcat cctccaggct tggcgacggg tgatgctcaa caacagcagc ctaaccctt tctctactgt cctcgttggc agctttgctt tgggtgtgt tttccagct ttgacttctg cctggcgag ggcgtttgga agagatttcc aagaaaagt tctgtctc cgtccccct ggcaacgccc cccgggaatg a gaggaggagt ttctgtcct CSDRQGVLT RDRSCSRKMN SSGCLSEEVG SLRPLTVVIL P MNGVSEGTGR NGILVMTVF RMARTVSTVC FFHLALADFM LSLSLPIAMY YTVSRQWLLG EWACKLYTF VFLSYFASNC LLVFISVDRCL ISVLYPWAL NHRTVQASW LAFGVWLLAA ALCSAHLKFR TTRKNGCTH CYLAFNSDNE TAQIWIEGV EGHIIIGHT FLGLFLGFLA IIGTCAHLIR AKLLREGVWH ANRPKRLLV LVSAFFIFWS PFNVLLVHL WRRVWLKEIY HPRMLLIQA SFAIGCVNNS LNPFLYFVG RDFQEKFFQS LVSALARAFA EEEFLSSCPR GNAPRE cagcctccct cctccacctc tgtctgccc gctgctcttg tctagtctg gtcaggagct A gactgcctcc agggctggaa tctgtgtc cctctgtgccc cagagcccca cgtatgctg</p>	Homo sapiens
483	160206 G Protein- Coupled Receptor GPR32	NM_001506	<p>atgaatgggg tctcgaggg gaccagaggc tgcagtgaaca ggcaacctgg ggtcctgaca A cgtgatcgct ctgttccag gaagatgaac tcttccggat gctgtctga ggaggtgggg tccctccgc cactgactgt ggttatectg tctgcgtcca ttgtctcgg agtgcgtggc aatgggctgg tgctgtggat gactgtctc cgatttcag ctctcactgt ctctgcccac catcacctt ttcttccacc tggcccttgc gacttccgga gactgggccc tctctgtct tcatctctgt ggacctgtg tatattgtct ccaggcagtg gctcctcggc agtaactgc ctctgtctt accaactcta catcacctt gtgttctca gctacttgc ctggaactgc ctctgtctt accaactcta catcacctt atctctgtcc tctacccctg ctgggcccgt aaccaccga ctgtgagcg ggcgagctgg ctggcccttg ggggtggct cctggccgct gctgtgtgt cctgcacct gaaattcccg acaaccagaa aatggaatgg ctgtacgac aggggtcgt gagggacaca ttataggagc cattggccac actgcccaga ttggattga aggggtcgt gacttagca atcataggca cctgcgcca cctcatccg ttcctgctgg gcttctggg ccttctggc ctgggtccat gcaaccggc ccaagaggct gctgctggg gccaaactct tgcgggagg ctctctttat cctctggtcc cagtttaacg tgggtgctgt ggtccatctg ctggtgagcg ctctctttat ggaatctac caccctcgg tctgtctcat cctccaggct tggcgacggg tgatgctcaa caacagcagc ctaaccctt tctctactgt cctcgttggc agctttgctt tgggtgtgt tttccagct ttgacttctg cctggcgag ggcgtttgga agagatttcc aagaaaagt tctgtctc cgtccccct ggcaacgccc cccgggaatg a gaggaggagt ttctgtcct CSDRQGVLT RDRSCSRKMN SSGCLSEEVG SLRPLTVVIL P MNGVSEGTGR NGILVMTVF RMARTVSTVC FFHLALADFM LSLSLPIAMY YTVSRQWLLG EWACKLYTF VFLSYFASNC LLVFISVDRCL ISVLYPWAL NHRTVQASW LAFGVWLLAA ALCSAHLKFR TTRKNGCTH CYLAFNSDNE TAQIWIEGV EGHIIIGHT FLGLFLGFLA IIGTCAHLIR AKLLREGVWH ANRPKRLLV LVSAFFIFWS PFNVLLVHL WRRVWLKEIY HPRMLLIQA SFAIGCVNNS LNPFLYFVG RDFQEKFFQS LVSALARAFA EEEFLSSCPR GNAPRE cagcctccct cctccacctc tgtctgccc gctgctcttg tctagtctg gtcaggagct A gactgcctcc agggctggaa tctgtgtc cctctgtgccc cagagcccca cgtatgctg</p>	Homo sapiens
484	160206 G Protein- Coupled Receptor GPR32	NP_001497.1	<p>atgaatgggg tctcgaggg gaccagaggc tgcagtgaaca ggcaacctgg ggtcctgaca A cgtgatcgct ctgttccag gaagatgaac tcttccggat gctgtctga ggaggtgggg tccctccgc cactgactgt ggttatectg tctgcgtcca ttgtctcgg agtgcgtggc aatgggctgg tgctgtggat gactgtctc cgatttcag ctctcactgt ctctgcccac catcacctt ttcttccacc tggcccttgc gacttccgga gactgggccc tctctgtct tcatctctgt ggacctgtg tatattgtct ccaggcagtg gctcctcggc agtaactgc ctctgtctt accaactcta catcacctt gtgttctca gctacttgc ctggaactgc ctctgtctt accaactcta catcacctt atctctgtcc tctacccctg ctgggcccgt aaccaccga ctgtgagcg ggcgagctgg ctggcccttg ggggtggct cctggccgct gctgtgtgt cctgcacct gaaattcccg acaaccagaa aatggaatgg ctgtacgac aggggtcgt gagggacaca ttataggagc cattggccac actgcccaga ttggattga aggggtcgt gacttagca atcataggca cctgcgcca cctcatccg ttcctgctgg gcttctggg ccttctggc ctgggtccat gcaaccggc ccaagaggct gctgctggg gccaaactct tgcgggagg ctctctttat cctctggtcc cagtttaacg tgggtgctgt ggtccatctg ctggtgagcg ctctctttat ggaatctac caccctcgg tctgtctcat cctccaggct tggcgacggg tgatgctcaa caacagcagc ctaaccctt tctctactgt cctcgttggc agctttgctt tgggtgtgt tttccagct ttgacttctg cctggcgag ggcgtttgga agagatttcc aagaaaagt tctgtctc cgtccccct ggcaacgccc cccgggaatg a gaggaggagt ttctgtcct CSDRQGVLT RDRSCSRKMN SSGCLSEEVG SLRPLTVVIL P MNGVSEGTGR NGILVMTVF RMARTVSTVC FFHLALADFM LSLSLPIAMY YTVSRQWLLG EWACKLYTF VFLSYFASNC LLVFISVDRCL ISVLYPWAL NHRTVQASW LAFGVWLLAA ALCSAHLKFR TTRKNGCTH CYLAFNSDNE TAQIWIEGV EGHIIIGHT FLGLFLGFLA IIGTCAHLIR AKLLREGVWH ANRPKRLLV LVSAFFIFWS PFNVLLVHL WRRVWLKEIY HPRMLLIQA SFAIGCVNNS LNPFLYFVG RDFQEKFFQS LVSALARAFA EEEFLSSCPR GNAPRE cagcctccct cctccacctc tgtctgccc gctgctcttg tctagtctg gtcaggagct A gactgcctcc agggctggaa tctgtgtc cctctgtgccc cagagcccca cgtatgctg</p>	Homo sapiens
485	160210 G Protein- Coupled	NM_004778	<p>atgaatgggg tctcgaggg gaccagaggc tgcagtgaaca ggcaacctgg ggtcctgaca A cgtgatcgct ctgttccag gaagatgaac tcttccggat gctgtctga ggaggtgggg tccctccgc cactgactgt ggttatectg tctgcgtcca ttgtctcgg agtgcgtggc aatgggctgg tgctgtggat gactgtctc cgatttcag ctctcactgt ctctgcccac catcacctt ttcttccacc tggcccttgc gacttccgga gactgggccc tctctgtct tcatctctgt ggacctgtg tatattgtct ccaggcagtg gctcctcggc agtaactgc ctctgtctt accaactcta catcacctt gtgttctca gctacttgc ctggaactgc ctctgtctt accaactcta catcacctt atctctgtcc tctacccctg ctgggcccgt aaccaccga ctgtgagcg ggcgagctgg ctggcccttg ggggtggct cctggccgct gctgtgtgt cctgcacct gaaattcccg acaaccagaa aatggaatgg ctgtacgac aggggtcgt gagggacaca ttataggagc cattggccac actgcccaga ttggattga aggggtcgt gacttagca atcataggca cctgcgcca cctcatccg ttcctgctgg gcttctggg ccttctggc ctgggtccat gcaaccggc ccaagaggct gctgctggg gccaaactct tgcgggagg ctctctttat cctctggtcc cagtttaacg tgggtgctgt ggtccatctg ctggtgagcg ctctctttat ggaatctac caccctcgg tctgtctcat cctccaggct tggcgacggg tgatgctcaa caacagcagc ctaaccctt tctctactgt cctcgttggc agctttgctt tgggtgtgt tttccagct ttgacttctg cctggcgag ggcgtttgga agagatttcc aagaaaagt tctgtctc cgtccccct ggcaacgccc cccgggaatg a gaggaggagt ttctgtcct CSDRQGVLT RDRSCSRKMN SSGCLSEEVG SLRPLTVVIL P MNGVSEGTGR NGILVMTVF RMARTVSTVC FFHLALADFM LSLSLPIAMY YTVSRQWLLG EWACKLYTF VFLSYFASNC LLVFISVDRCL ISVLYPWAL NHRTVQASW LAFGVWLLAA ALCSAHLKFR TTRKNGCTH CYLAFNSDNE TAQIWIEGV EGHIIIGHT FLGLFLGFLA IIGTCAHLIR AKLLREGVWH ANRPKRLLV LVSAFFIFWS PFNVLLVHL WRRVWLKEIY HPRMLLIQA SFAIGCVNNS LNPFLYFVG RDFQEKFFQS LVSALARAFA EEEFLSSCPR GNAPRE cagcctccct cctccacctc tgtctgccc gctgctcttg tctagtctg gtcaggagct A gactgcctcc agggctggaa tctgtgtc cctctgtgccc cagagcccca cgtatgctg</p>	Homo sapiens

Receptor
GPR44
(CRTH2)

caacgccaca ctgaagccac ttgccccat cctggagcag atgagccgtc tccagagcca
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gcactcacac gcgaagtat caccagggtg cgcgggttca attcgatctc cggactcctg
ccgcagtgat caaagtccga ggggcgggac ttaaagcagt gcttctcaa ccttgatgtg
agactctgaa tctttttcag aaacagttag taaagcagt gcttctcaa ccttgatgtg
cctgtgaatc acctagggtt cttgttaagt gcagcagtc cagggagcc ggggcgggt
actgagagtc tgacttaac aagctcccc ggcgagaagc cagtgcgga ggttcacag
cgaaggcctg agtaacacaa agtgaaactc gtaatagact tcccactcta ggcagtgga
gtcggaaagg cacacggggt gcgtctccc ggagttcagt ttaccagat gatggggag
gggggaaagg gttttatgtt aaaccatcca tgtatttttg gagaagagag aggaaggtt
tgagaagcac tgttccagcc tgccctcttc atttagccaa tgcttactgc gctagacgct
tcattccaca atcttaaggg gcagcttcta tttagccagtc ttaccagctg agcacattct
ggctcaggga ggttaagtga cttgcccagt tttagggcta acgaccacag ggtctgcact
ctaaccctag gcatcacatg ctcaatgact cctggtgag cgaggacatt ctctgacct
ctcagaggac ttaagatgct acctgtgac ccagcactgc ccaagtgc tccaaggcag
aagcagcagg ggtggcgtg gtcaagcact cgggaaacct cgggctaact aaatccaatg
ggggaatatg ctaaaagtct tcggtcgtta gaagtgaat gggcacagca actctaagac
tacagcacac gtcatttctt agctaagcgg accagcctcc ctgtcgctt ggtgttctgt
gggatccctc tgggcactgg taatcccaag atctgtgac cccgcctcc aggccacatg
gggtgggca gctaccattt cctttttgag gatgggagg gtaacttgca cctctgacct
atcacttcca ctgcacccc tctcattcct ccacctgcg tggacttggg gtcagagact
gctgtgtttg agctctgag cccagggacc gaaaagtgg tgtaaatgaa ttttgcctgg
tggatgaaat gtcagtggaa gaagcagatg agaaactctt gagatcttgg tctgtgttt

486	160210 G Protein-Coupled Receptor GPR44 (CRTH2)	NP_004769.1	<p>tttctgccac caaaggccag ggtcactgaa ggcttgcccc acagcagggtg ctgagcaaaag ggaacagtga ggtgcccagc tagctgcaga gccacctgtg gttgacacct cgccctgtct ccctcccatc ccttccccct ttactcatag cacttcccc ccttgacacg tgggtcattt tgcttggtta ttatgttttc ttctccatag aatgaaagct cctgagggc agggactttg gtctattgtc tgtatttgc ggtgcctagg attgtgcctg tatgcaacag gcaactcaata aatattttg ctgtagactg</p> <p>MSANATLKPL CPILQMSRL QSHSNTSIRY IDHAAVLLHG LASLLGLVEN GVILFVVGCR P MRQTVVTWV LHLALSDLLA SASLPFTYF LAUGHSWELG TTFCKLHSSI FFLNMFASGF sapiens LLSAISLDRC LQVVRPWAQ NHRVTAAHK VCLVLWALAV LNTVPYFVFR DTISRLDGR I MCYNNVLLN PGPDRTATCN SRQAALAVSK FLIAFLVPLA IIASSHAAVS LRQHRGRRR PGREFVLVA VAAAFALCWG PYHVFSLEA RAHANPGLRP LVWRGLPEVT SLAFENSVAN PVLVLTCPD MWLLGSCAAS PQTGPLNRAL SSTSS EPRGRPARLL</p>	Homo sapiens
487	160212 G Protein-Coupled Receptor GPR52	NM_005684	<p>atgaatgaat ccagggtgac tgaatggagg atcctgaaca tgagcagtggt cattgtgaat A gcgtccgagc gtcactcctg cccacttggg tttggccact acagtggtgtt ggaatgtctgc atcttcgaga cagtggttat tgtgtgtctg acatttctga ttattgtctg gaaatcaaca gttatctttg cctttcattg tgcctcactg ttacatcatt atactaccag ctatttcatt cagacgatgg catatgctga tcttttcgtt ggagtttagct gcttgggttcc tactctgtca cttctccact actccacagg tgtccacagg tcattaaactt gccgggtttt tggatatatc atctcagttc taaaaagtgt ttctatggca tgccttgctt gcatcagtg ggaatgttat cttgcaataa ccaagcctct tctctacaat caacttggtca ccccttgctg cttgagaatt tgcatattt tgatctggat ctactctgc taaattttct tgccttccct ttttggctgg gggaaacctg gttaccatgg tgacattttt gaatgggtgtg ccacgtcttg gctcaccaagt gcctatttta ctggctttat tgtttgctta ctttatgctc ctgctgctt tgttgcctgc ttcacctact tccacatttt caaaatttgc cgtcagcaca ccaaagagat aaatgaccga agagcccgat tccctagtca tgaggttagat tcttccagag agactggaca cagccctgac cgtcgtacag ccatggtttt gtttaggata accagtgtat ttatatgtct gttggtcccc tatataattt actttcttct agaaagctcc cgggtcttgg acaatccaac tctgtccttc ttaacaaact ggcttgcat agtaaatagt ttttgaact gtgtaataata cagcctctcc aacggcgttt tccggctagg cctccgaaga ctgtttgaga caatgtgcac atcctgtatg tgtgtgaagg atcaggaagc aagaagaacc aaacctagga aacgggctaa ttcttgctcc attga</p> <p>ILNMSSGIVN ASERHSCPLG FGHYSVVDVC IFETVIVILL TFLIAGNLT P VIEAFHCAPL LHYYTTSYFI QTMAYADLFV GVSCLVPTLS LLHYSTGVHE SLTCRVFGYI sapiens ISVLKSVSMA CLACISVDRY LAITKPLSYN QLVTPCRLRI CIILIIWYSC LFLPSFFGW GKPGYHGDIF EWCATSWLTS AYFTGFIVCL IYAPAAAFVVC FTYHFIFKIC ROHTKEINDR RARFPSHEVD SSRETGHSPD RRYAMVLFRI TSVFYMMLWP YIIYFLLSS RVLDNPTLSF LTTWLAVSNS FCNCVIYSLN NGVFRGLRLR LFETMCTSCM CVKDQEAQEP KPRKRANSCS I</p>	Homo sapiens
488	160212 G Protein-Coupled Receptor GPR52	NP_005675.1	<p>atgagtcagc aaaacaccag tggggactgc ctgtttgacg gtgtcaacga gctgatgaaa A accctacagt ttgcagtcca cateccacc ttcgtcctgg gcctgctcct caactgctg</p>	Homo sapiens
489	160217 G Protein-Coupled	NM_005683		Homo sapiens

490	Receptor GPR55	160217 G Protein- Coupled Receptor GPR55	NP_005674.1	<p>gcatccatg gcttcagcac ctctcttaag aacaggtggc cgtattatgc tgcacacctc</p> <p>atctacatga tcaacctggc agtctttgac ctgctctgtg tgctctccct ccatccaag</p> <p>atggtcctgt ccaggtaca gtcccccctt cgtccctgtg gcacctgggt ggagtgcctt</p> <p>tacttcgtca ccatgtacgg aagcgtcttc acctctgtt tcatcagcat ggaccggttc</p> <p>ttggccatcc gttaccgct actggtgagc cactcgggtc cccaggaag atctttggga</p> <p>tctgcatga caatctgggt cctggtgtg accggaagca tccctatcta cagtttccat</p> <p>gggaaagtgg aaaaatacat gtgcttccac aacatgtctg atgatactg gagcgccaag</p> <p>gtcttcttc cgctggaggt gtttggttc cctctccca tgggcatcat gggcttctgc</p> <p>tgctccagga gcatccacat cctgctggc cgcgagacc acaccagga ctgggtgcag</p> <p>cagaaagcct gcatctacag catcgagcc agcctggctg tattcgtgt cctctctc</p> <p>ccagtcacc tgggttctt cctgcagttc ctggtgagaa acagctttat cgtagagtgc</p> <p>agagccaagc agagcatcag ctctcttctg caatgtoca tgtgttctc caatgtcaac</p> <p>tgctgcctgg atgtttctg ctactactt gcatcaaaag aattccgcat gaacatcagg</p> <p>gcccaccggc ctccaggtt ccagctggc ctgcaggaca caacgattc ccggggctaa</p>	Homo sapiens
491	Receptor GPR35	160219 G Protein- Coupled Receptor GPR35	NM_005301	<p>atgaatggca ctcaaacac ctgtggctcc agcactca cctggcccc agcgatcaag A</p> <p>ctggctctt cgcctactt gggcgtcctg ctgtgtctag gctgctgct caacagcctg</p> <p>gcgctctgg tgtctgctg cgcgatcgag cagtggacgg agaccgctc ctacatgacc</p> <p>aacctggcg tggcgacct ctgcctgctg tgcacttgc cctcgtgct gactccctg</p> <p>cgagacact cagacacgc cctgtgccag ctctccagg gcatctacct gaccaacagg</p> <p>tacatgagca tcagcctggt cagggccatc gccgtggacc gctatgtggc cgtgcggcac</p> <p>ccgtgcgtg ccgcgggct ggggtccccc aggcaggctg cggcgtgtg cgcggtcctc</p> <p>tggtgctgg tcatcgctc cctggtggt cgttggctcc tggggttca ggaggcgcc</p> <p>ttctgcttca ggagcaccg ggtccttctg tccctgaag tggtagctg cctggcccc</p> <p>tacctgccc tggcctggt ggtccttctg gccacgag gccactgccc catggtctgg</p> <p>agggcacc caagcgtgg gcagcgag gctcgtctc ctgcccctg acgtgggct gacagtgc</p> <p>gcaaacctc tgggttctg ggtcgtctc ctgcccctg cctgagcgc cctgtacata</p> <p>ctgcagtg gctggaacgc ctgtgccc cttgagacga tccgtcgcg cctgtacata</p> <p>accagcaagc tctcagatgc caactgctg ctgagcgcca tctgctacta ctacatggcc</p> <p>aaggagtcc aggagcgctc tgcactggc gtggctcccc gtgctaagg ccacaaaagc</p> <p>caggactct tgtcgtgac cctgcctaa</p> <p>NLAVALDCLL CTLFFVLHSL RDTSDTFLCQ LSQGIYLTNR YMSISLVTAI AVDRYAVRH</p> <p>PLRARGLRSP RQAAAVCAVL WVLVIGSLVA RLLIGTQEGG FCFRSTRHNF NSMRFPILGF</p> <p>YLPLAVVVC SLKVVTAQAQ RPPTDVGOAE ATRKAARMVM ANLLVFVCF LPLHVGITVR</p> <p>LAVGWNACAL LETIRRALYI TSKLSDANCC LDAICYMYMA KEFQASALA VAPRAKAHS</p>	Homo sapiens
492	Receptor GPR35	160219 G Protein- Coupled Receptor GPR35	NP_005292.1	<p>atgaatggca ctcaaacac ctgtggctcc agcactca cctggcccc agcgatcaag A</p> <p>ctggctctt cgcctactt gggcgtcctg ctgtgtctag gctgctgct caacagcctg</p> <p>gcgctctgg tgtctgctg cgcgatcgag cagtggacgg agaccgctc ctacatgacc</p> <p>aacctggcg tggcgacct ctgcctgctg tgcacttgc cctcgtgct gactccctg</p> <p>cgagacact cagacacgc cctgtgccag ctctccagg gcatctacct gaccaacagg</p> <p>tacatgagca tcagcctggt cagggccatc gccgtggacc gctatgtggc cgtgcggcac</p> <p>ccgtgcgtg ccgcgggct ggggtccccc aggcaggctg cggcgtgtg cgcggtcctc</p> <p>tggtgctgg tcatcgctc cctggtggt cgttggctcc tggggttca ggaggcgcc</p> <p>ttctgcttca ggagcaccg ggtccttctg tccctgaag tggtagctg cctggcccc</p> <p>tacctgccc tggcctggt ggtccttctg gccacgag gccactgccc catggtctgg</p> <p>agggcacc caagcgtgg gcagcgag gctcgtctc ctgcccctg acgtgggct gacagtgc</p> <p>gcaaacctc tgggttctg ggtcgtctc ctgcccctg cctgagcgc cctgtacata</p> <p>ctgcagtg gctggaacgc ctgtgccc cttgagacga tccgtcgcg cctgtacata</p> <p>accagcaagc tctcagatgc caactgctg ctgagcgcca tctgctacta ctacatggcc</p> <p>aaggagtcc aggagcgctc tgcactggc gtggctcccc gtgctaagg ccacaaaagc</p> <p>caggactct tgtcgtgac cctgcctaa</p> <p>NLAVALDCLL CTLFFVLHSL RDTSDTFLCQ LSQGIYLTNR YMSISLVTAI AVDRYAVRH</p> <p>PLRARGLRSP RQAAAVCAVL WVLVIGSLVA RLLIGTQEGG FCFRSTRHNF NSMRFPILGF</p> <p>YLPLAVVVC SLKVVTAQAQ RPPTDVGOAE ATRKAARMVM ANLLVFVCF LPLHVGITVR</p> <p>LAVGWNACAL LETIRRALYI TSKLSDANCC LDAICYMYMA KEFQASALA VAPRAKAHS</p>	Homo sapiens

493	160221 G Protein-Coupled Receptor GPR27	NM_018971	QDSLVCVTLA	atggcgaacg cgagcgagcc ggtgtgcagc ggcggcgggc agcgcgccgc cctggggcctc A	Homo sapiens
				aagctgggcca cgctcagcct gctgctgtgc gtgagccctag cgggcaacgt gctgttcgcg	
				ctgctgatcg tgcgggagcg cagcctgcac cgcgccccgt actacctgct gctcgacctg	
				tgcctggccg acgggctcg ggcgtcgcg tgcctcccg cgcctcatgct ggcggcgcg	
				cgtgcggcg ggcggcggg ggcggcgccg ggcgtgctgg cctgcaagct gctcgccttc	
				ctggccgcgc tctctgctt ccacgcgcg ccgcttctat gcagagcgcc tggccggctg gccgtgcgcc	
				tacctggcca tgcgcacca ccgcttctat gcagagcgcc tggccggctg gccgtgcgcc	
				gccatgctgg tgtgcgcgc ctgggcgctg gcgctggccg cggccttccc gccagtgcg	
				gacggcggtg gcgacgacga ggacgcgccc tgcgccccg agcagcgcc cgcggcgcc	
				cccggcgcc tgggcttct gctgctgctg gccgtggtg tggcgccac gcacctcgtc	
				tacctccgc tgccttctt catccacgac cgcgcgaaga tgcggcccg gcgctggtg	
				cccgcgctca gccacgactg gacctccac ggcggcgcc ccaccggcca ggcggcgcc	
				aactggacgg cgggcttcg cgcggggccc acgcggccc cgttgttgg catccggccc	
				gcaggccgg cgcggggc agatgttcta cgcgctcac ctgctcttc tgcctcttg gggccctac	
				aggctgtgca gctacctgc ggtcctggtg cggcccgcc cgcctcccca ggcctacctg	
				acggcctccg tgtgctgac ctgcgcgag gccggcatca acccctcgt gtgcttctc	
				ttcaacagg agctgagga ctgcttcagg gccagttcc cctgctgcca gagccccgg	
				accaccagg cgaccatcc ctgcgacctg aaaggcattg gtttatga	
494	160221 G Protein-Coupled Receptor GPR27	NP_061844.1	MANASEPGGS GGEEAALGL KLATLSLLC VSLAGNVLFA LLIVERSLH RAPPYLLLDL P	CLADGLRALA CLPAVMLAR PAAAAAGAPP GALGCKLLAF LAALFCFHAA FLLLGVTTR	Homo sapiens
				YLAIAHREFY AERLAGWPCA AMLVCAAWAL ALAAFPFVL DGGDEDEDAP CALEQRPDGA	
				PGALGFLLL AVVVGATHLV YLRLLFFIHD RRMRPARLV PAVSHDWFH GPGATGQAAA	
				NWTAGFGRGP TPPALVGIRP AGPGRGARRL LVLEEFKTEK RLCKMFYAVT LLFLLWGPY	
				VVASYLRVLV RPAVPOAYL TASWLTFAQ AGINPVVCFE FNRELRDCFR AQFPCCQSPR	
				TTQATHPCDL KGIGL	
				atggtccctc acctcttct gctctgtctc ctccccctgg tgcgagccac cgagccccac A	
				gagggccggg ccgacgagca gagcgggag cggccctgg cgtgccccaa tgcctcgca	
				ttcttctctt ggaacaacta cacttctcc gactggcaga acttggggg caggaggcg	
				tacggcgctg agtcccagaa cccacgggtg aaagccctgc tcattgtggc ttactcttc	
				atcattgtct tctcactct tggcaacgtc ctggctctgc atgtcattct caagaaccag	
				gaaatgcact cggccaccag cctcttcac gtcaacctg cagttgccga cataatgatc	
				acgctgctca acacccctt cactttggtt cgttttgtga acagcacatg gatattggg	
				aagggcattg gccatgtcag ccgctttgcc cagtactgct cactgcactg ctcagcactg	
				acactgacag ccattgcgtt ggatgcacc caggtcatca tgcacccctt gaaacccgg	
				atctcaatca caaagggtgt catctacac gctgtcatct ggaccatggc tacgttctt	
				tactccccac atgtatctg ccagaaatta ttacacctca aatacagtga ggacattgtg	
				cgtccctct gcctgccaga cttccctgag ccagctgacc tcttctggaa gtacctggac	
				ttggccaact tcatcctgct ctacatcctg cccctcctca tcatctctgt ggcctacgct	
495	160222 G Protein-Coupled Receptor GPR72	NM_016540			Homo sapiens

496	160222 G Protein- Coupled Receptor GPR72	NP_057624.1	<p>cgtgtggcca agaaactgtg gctgtgtaat atgattggcg atgtgaccac agagcagtag tttgcctgc ggcgcaaaaa gaagaagacc atcaagatgt tgatgctggt gtagtcctc tttgcctct gctggttccc cctcaactgc tactgctccc cctgtcccag caaggtcatc cgcaccaaca atgcccctca ctttgccctc cactggtttg cctgagcag cactgctat aacccttca tatactgctg gctgaacgag aacttcagga ttgagctaaa ggcattactg agcatgtgc aaagacctcc caagcctcag gaggacggg aacctccc agttccttcc ttcagggtgg cctggacaga gaagaatgat gcccagagg ctcctctgc caataacctc ctgccacct cccaactcca gctcgggaag acagacctgt catctgtga accattgtg acgatagtt agaagaggtt gggaagaggg agtggagggt gctgtctcc acctgaggca gggaaagaga gctattctc acacatgac ttcagagtgc tggaaacaca ctcctgcaga aggcttagg actcttgaat tctaggaaa ctgtccagcc tctagcccc atgtgatgtg aaaactaaaa ggcaccacca actagacatg tttcataaaa tccccatca agaaacactg ggaggcacag cagcctgtat cctcaggaaa gaggagcag gacaacgtg gcccagatgg gggctgaatc attcaactgc tcccatctgt ggggcagctg ctgccttaca gcccttcta ctagactgag catccgaag gagacctaaa tcatactttg ggtgtggtga cccagatgca cagagctctg cttgaacag gtacacggc cagggaatg ccagcaa</p> <p>YGAESQPTV KALLIVAYSF IIVFSLFENV LVCHVIFKQ RSHSATSLEI VNLAADIMI TLINTPFTLV REWNSTWIF KGMCHVSREFA QYCSLHVSAL TLTAIADVRH QVIMHPLKPR ISITKGVII AVIWTMTFF SLPHAIQKL FTFKYSIEDIV RSLCLPDFPE PADLFWKYLD LATFILLYIL PLIIISVAYA RVAKKLWLCN MIGDVTTEQY FALRRKKKT IKMIMLVVVL FALCWFPINC YVLLLSKVI RTNNALYFAF HWFAMSSTCY NPFYICWLE NFRIELKALL SMCQRPPKPQ EDQSPSPVS FRVAWTEKND GQRAPIANNL LPTSQLSGK TDLSSVEPIV TMS</p>	Homo sapiens
497	160223 G Protein- Coupled Receptor G2A	NM_013345	<p>gggaggggtg cgaggctagc cagcgaggcg gggccctggg tcattttaaa ctctcagagt A gaacgtcttg ataggaccga caagacgcat gacatgtact tagatagctt atcttagagc cacactgaga ttggaacccg caaatatgc caggaggaa ggtgagcaag ggacacgaca ctcaccggga taaacccaac aagcgagcg aggtgtggtg gaaacggan cctgcacac cgccggggga aggtgggcn ccgccaccac cgtggaagaa cagcgcgan gcaacccacg agatgagacg gaactgcccgt gagatccagc aatnccnact gtgggtctga cccaggatan cggaagcag ggacgtgaac agcctctc atgttcttga caccgtcatt ctcagcagct cagctaaggc acagaggcag ccgagcgtct gtcagcagag tegtggctga gcagaacacg ccacacgcca cagccacac gccacactg caggattgct gaagatggaa gggcacagtg gaatatatat atatatttat atttttggcg agaccttga agacacactg aatacaatgg aataccatcc cgcctttgaa aggaaggaa atcctggcac acgctgaac tgaagacacg ttgaggacac tgtgtgtagt ggagcacgtg agacacggaa ggcacacgc tgaagacacg cagagatgcc caccacgtg ggaggtgac aggggagccc agcgacaga gacaaagtgg aatggaggcc tgggggctgg gagcaaatgc ggagcagtg cttctgggg cagagtctcc gtttgggaag atgagaaggt tctgcgacg gatgctggcg atggttgcag aagaatgtga atgtgccccaa tgctactgaa aaacggttac aatggaaacg ccacccagc gaccaccat gccccgtggg cctcctctgg cctctccgc aagacctga acaacgtgtc cttcgaagag</p>	Homo sapiens

[illegible]

500	160224	Endothelin Type B Receptor- Like Protein 2 (ETBR-LP- 2)	NP_004758.1	<p>accgagagct cctacagtgc ctatgccatc atgcttctgg cgctggtggt gtttgcggtg ggcattgtgg gcaacctgtc ggtcatgtgc atcgttggc acagtacta cctgaagagc gcttggaact ccaaccttgc cagcctggcc ctctggatt tcttggtctt ctttttctgc ctccctattg tcatctcaa cgtctcctct aagcagagcc tactggttga cgtttcttgt cgtgccgtgc ccttcattga ggtctcctct ctgggagtca cgactttcag cctctgtgcc ctgggcatg accgcttcca cgtggccacc agcacctgc ccaaggtgag gccatcagag cgtgccaat ccactcctgg caagtggct gtcactggg tgggtccat gacgtggct gtgctgagc tctgtgtg gcagctggca caggagcctg cccccaccat gggcacccctg gactcatgca tcatgaacc ctacagccag ctgcccagat cctgtattc actggtgatg acctaccaga acgcccgc atgtgtgtac ttgggtgct acttctgct gccatcctc ttcacagtca cctgccagct ggtgacatgg cgggtgcgag gccctccagg gaggaagtca gagtgcagg ccagcaagca cagcagtggt gagagccac tcaacagcac cgtggtgggc ctgaccgtgg tctacgctt ctgacccctc ccagagaacg tctgcaacat cgtggtggcc tacctctcca ccgagctgac ccgccagacc ttggacctc tgggacctc caaccagttc tccaccttct tcaaggcgc catcacccca gtgctgctc ttgcatctg caggccgctg ggcaggcct tctggactg ctgctgctg tctgtgtg agtagtgcg cggggtctcg gaggcctctg ctgccaatgg gtcggacaac aagctcaaga ccgaggtgtc cttccatc tacttccaca agcccaggga gtcaccccca ctcctgcccc tgggcaacc ttgctgaggg cccagtaggg gtggggagg agggagaggg cgccacccc gccggtgtct gctgttctt cccataggt cttgctttgt tgctgtctt gctgtctagg gatggacttg gttcctcttg tcaaggttg ggaatccg</p>	Homo sapiens
501	160225	Sphingolipid Receptor Edg6	NM_003775	<p>gagtcagccc ccgggggagg ccatgaacgc caggggacc ccggtggccc ccgagtccctg A ccaacagctg cgggccggcg ggcacagccg gctcatgtt ctgcactaca accactcggg ccggtggccc gggcggggg ggcgggagga tggcgccctg gggccctgc ggggctgtc ggtggccgccc agctgctgg tgggtgctgga gaactggcg gtgctggcg ccataccag ccacatggcg tcgcgacgt gggctacta ttgctgtgt aacatcacg tgagtgaact gctcacggcg cggcctacc tggccaact gctgctgtg gggccccgca ccttccgtct ggcggccgccc cagtgttcc tacgggagg cctgctctc accgcccgg ccgctccac cttcagcctg ctttcaactg caggggagcg ctttgccacc atggtggcg cggtggccga gagcggggccc accaagacca gccgctcta cggcttcatc ggcctctgt ggtgtgtggc cgcgctgctg gggatgctg ctttgtggg ctggaactgc ctgtgcct ttgacctg ctccagcctt ctgccccctt actccaagcg ctacatcctc ttctgcctgg tgatcttcg</p>	Homo sapiens

502	160225 Sphingolipid NP_003766.1	MNATGTPVAP	ESCQQLAAGG	HSRLIVLHYN	HSGRLAGRGG	PEDGGLGALR	GLSVAASCIV	P	Homo sapiens
	Receptor	VLENLLVLA	ITSHMRSRRW	VYYCLVNITL	SDLLTGAAYL	ANVLLSGART	FRLAPAQWFL		
	Edg6	REGLLFTALA	ASTFSLIFTA	GERFATMVRP	VAESGATKTS	RVYGFIGLCW	LLAALLGMLP		
		LLGWNCICAF	DRCSLLPLY	SKRYILFCLV	IFAGVLATIM	GLYGAIFRLV	QASGQKAPRP		
		AARKARLL	KTVMILLAF	LVCWGPLEGL	LLADVFGSNL	WAQEYLRGMD	WILALAVLNS		
		AVNPIYSFR	SREVCRAVLS	FLCCGCLRLG	MRGPGDCLAR	AVEAHSGAST	TDSSLRPDRS		
		FRGSRSLFR	MREPLSSISS	VRSI					
503	160228 T-Cell Death-Associated Gene 8 (GPR65)	NM_003608	atgaacagca	catgtattga	agaacagcat	gacctggatc	actatttgtt	tccattgtt	A
		tacatctttg	tattattagt	cagcattcca	gccaatattg	gacctctgtg	gatctctgtg	tgtgtctttc	Homo sapiens
		ctgcaaccca	agaaggaaag	tgaactagga	atttacctct	tcagtttgtc	actatcagat		
		ttactctatg	cattaaactct	ccctttatgg	attgattata	cttggaataa	agacaactgg		
		actttctctc	ctgacctgtg	caaaaggagt	gcttttctca	tgtacatgaa	gttttacagc		
		agcacagcat	tcctcacctg	cattgccgtt	gacgggtatt	tggctgtgtt	ctacctttg		
		aagttttttt	tcctaaggac	aagaagaatt	gcactcatgg	tcagccctgc	catctggata		
		tggaaacca	tcttcaatgc	tgatcatgtt	tgggaagatg	aaacagtgtg	tgaatatgtc		
		gatgcgaaa	agtctaattt	tactttatgc	tatgacaaat	acccttttag	gaaatggcaa		
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		atctgtaacc	gaaagtcta	caaagctgtg	cggcacataa	agccacgga	aaacaaggaa		
		aagaagagaa	tcataaaact	acttgtcagc	atcacagtta	cttttgtctt	atgctttact		
		ccctttcatg	tgatgttgct	gattcgctgc	attttagagc	atgctgtgaa	cttcgaagac		
		cacagcaatt	ctgggaagcg	aacttacaca	atgtatagaa	tcacggttgc	attaacaagt		
		ttaaatgttg	ttgctgatcc	aattctgtac	tgtttttgta	ccgaacacgg	aagatatgat		
		atgtggaata	tattaaaatt	ctgcactggg	aggtgtaata	catcacaaag	acaaagaaaa		
		cgcatacttt	ctgtgtctac	aaaagatact	atggaattag	aggctcttga	gtag		

504	160228	T-Cell Death- Associated Gene 8 (GPR65)	NP_003599.1	MNSTCIEEQH DLDHYLFPIV YIEFIIIVSIP ANIGSLCVSF LQPKKESELG IYLFSLSLSD P LLYALTLPW IDYTWNKDNW TFSALCKGS AFLMYMKFYS STAFLTCAIV DRYLAVVYPL KFFFLRTRRI ALMVSLSIWI LETIFNAVML WEDETVEYC DAEKSNFTLC YDKYPLEKWQ INLNLFRTCT GYAIPLVITIL ICNRKVIQAV RHNRKATENKE KKRIIKLLVS ITVTFVLCFT PFHVMILLRC ILEHAVNFED HSNRGKRTYT MYRITVALTS LNCVADPILY CFVTETGRYD MWNILKFCRG RCNTSQRQK RILSVSTKDT MELEVLE	Homo sapiens
505	160300	Encephalopsi n	NM_014322	cgagccccgc cgcaagctga gcgcctccgc ccgcccaggcg cgccggcgcc ggcccatgta A ctcggggaac cgcagcggcg gccacggcta ctgggacggc ggccggggcg cgccggcgtga ggggccggcg ccggcgggga cactgagccc cgcgccccctc ttgagccccg gcacctacga ggccctggcg ctgctgctgg gctccattgg gctgctgggc gtcggcaaca acctgctgggt gctcgtccct tactacaagt tccagcggct ccgacactccc actcacctcc tctgggtcaa catcagcctc agcgacctgc tgggtgctcc ctccgggggt acccttacct tctgtgctcg cctgaggaa cggctgggtgt gggacacctt gggctgctgt tgggacgggt ttgagggcag cctcttcggg atgtttcca ttgccacctt aacctgtctg gcctatgaac gttacattcg cgtggtccat gccagagtga tcaatttttc ctggccctgg agggccatta cctacatctg gctctactca ctggcgtggg caggagcacc tctcctggga tggaaacaggt acatcctgga cgtacacgga ctaggctgca ctgtggactg gaaatccaa gtagcacaag attctcctt tgtgcttttc ttattcttg gctgctgggt ggtgccccctg ggtgtcatag cccattgcta tggccatatt ctatatcca ttggaatgct tctgtgtgtg gaagatcttc agacaattca agtgatcaag attttaaaat atgaaaagaa actggccaaa atgtgctttt taatgatatt caccttctcg gtctgttggg tgccttata cgtgatctgc tcttggtgg ttaatgggtca tggtcacctg gtcactccaa caatatctat tgttctgtac ctctttgcta aatcgaaacac tgtatacaat ccagtgtatt atgtcttcat gatcagaaa gtttcgaagat cctttttgca gcttctgtgc ctccgactgc tgaggtgcca gaggcctgct aaagacctac cagcagctgg aagtgaatg cagatcagac ccattgtgat gtcacagaaa gatggggaca ggccaaagaa aaaagtgact ttcaactctt ctccatcat ctttctatc accagtgatg aatcactgtc agttgacgac agcgacaaa ccattgggtt ccaaggtttg atgttaatcc aagttcgtcc ttgtaggaa tgaaggatgg caacgaaagg tggggcctta aattggatgc cacttttggg ctttcatcat cctcctgaag aagaagtgtc tggaaataccc gttctatgta atataacag aaccttgtgg tccagcagga aatccgaatt gcccatatgc tcttggcctt caggaaagagg ttgaacaaaa acaaatctt ttaattcaac ggtgcttata cataatgaaa aaaccacttg tgcacacgat gggcatctaa catcatcatc ttctaattgt ttggagattt tcatttcaaa tataattttt aaattactct attttccaaa acacgtaatg catttttctc gaaaaacact tactgtaaaa ataatgtgc cgtacacatg tgtgaagtat ctagaacata ctgaattttt tttgtactgt tggactctat tcaagtctat gtcctatctc tgatcaagtt atcaaggaga taattctaga atgaaaaaga aaatcctctt gttggaaca aaagacgttt tatatgtgca gtatgacaaa gagggtttc agagacaact ttgaatcctt gtcagcctgg agaccagcac cagaggaaatc tacaaggcaa actcccatat atttgcctcc cccaaattgc tggccctaca gactcaaaagc tctttttctt tgtttgtgtg tttctctaaa aatttactgt tcttgtcga tgttatataa gccaggaggt tctaagacgc cagctctttg agatttgctc attccccgt attccccaca tatatattac atataccgc taataaattt atgtttgttt taaaaaaaaa	Homo sapiens

506	160300	Encephalopsi n	NP_055137.1	aaaaaaa MYSGNRSGGH GYWDGGGAAG AEGPAPAGTL SPAPLFSPGT YERLALLLGS IGLLGVGNL P LVLVLYKFK RLRTPTHL LL VNISLSDLLV SLFGVTFTFV SCLRNWVWD TVGCVWDGFS GSLEGIIVSIA TLTVLAYERY IRVHVHARVIN FSWAWRAITY IWLYSLAWAG PLLGNWRYI LDVHGLGCTV DWKSKDANDS SFVLFLFLGC LVVPLGVIAH CYGHILYSIR MLRCVEDLQT IQVIKILKYE KKLAKMCF LM IFTEFLVCMP YIVTCFLVN GHGLVPTPI SIVSYLFAKS NTVYNPVIY FMIRKFRRSL LQLLCLRLR QORPAKDLP A GSEMQRPI VMSQKDGRP KKKVTFNSS IIFIITDES LSVDDSDKTI GVQSLMLIQV RPL	Homo sapiens
507	160312	Sphingolipid Receptor Edg5	NM_004230	atgggcagct tgtactcgga gtacctgaac cccaacaagg tccaggaaca ctataattat A accaaggaga cgctggaaac gcaggagacg acctcccgcc aggtggcctc ggccttcac gtcatcctct gttgcgccat tggccttcgt agccaatacc ttgctctctg gctctgtcac gctgaggtg aacagcaagt tccactcggc aatgtacctg ttctcgggca acctggcgc ctcgatcta ctggcagcg tggccttcgt agccaatacc ttgctctctg gctctgtcac gctgaggtg acgctgtgc agtggtttgc ccgggagggc tctgctctca tcagctctc ggcctctgtc ttcagcctcc tggccatcgc cattgagcgc cactgcccga ttgccaaagt caagctgtat ggcagcgaca agagctgccg catgcttctg ctcatcgggg cctcgtggct catcctgctg gtcctcggtg gctgccccat ccttggtctg aactgcctgg gccacctga ggcctgctcc actgtcctgc ctctctacgc caagcattat gtgctgtgcg tggtagacct ctctccac atcctgttgg ccactgtggc cctgtacgtg cgcactactc gctggttccg ctcaagccac gctgacatgg ccgccccgca gacgctagcc ctgctcaaga cggtcacct cgtgctaggc gtctttatcg tctgctggct gcccgccttc agcactctcc ttctggacta tgcctgtccc gtccactcct gccgatacct ctacaaagcc cactactttt tcgccgtctc caccctgaat tccctgctca acccgtcat ctacacgtgg ccagccggg cactgcggcg ggaggtgctt cggccgctgc agtgctggcg gccgggggtg ggggtgcaag gacggagggc ggtcgggacc cggggccacc acctcctgcc actccgcagc tccagctccc tggagagggg catgcacatg cccacgtcac ccacgttctt ggagggcaac acggtggtct ga	Homo sapiens
508	160312	Sphingolipid Receptor Edg5	NP_004221.1	MGSLYSEYLN PNKQEHYNY TKETLETOET TSROVASAFI VILCCAIVE NLLVLIAR P NSKFHSAMYL FLGNLAASDL LAGVAFVANT LLSGSVTLRL TPVQWFAREG SASITLSASV FSLLAIAIER HVAIAKVLY GSKSCRM LL LIGASWLISL VLGGLPILGW NCLGHLEACS TVLPLYAKHY VLCVVTIFSI ILLAIVALY RIYCVVRSSH ADMAAPQTLA LLKTVTIVLG VFIVCWLPAF SILLLDYACP VHSCPILYKA HYFFAVSTLN SLLNPVIYTW RSRDLRREVL RPLQWRPGV GVQRRRVGT PGHLLPLRS SSSLERGMHM PTSPTFLEGN TVV	Homo sapiens
509	160314	G Protein- Coupled Receptor GPR103	AF411117	atgatctgct gcagtgtctc tagccctagg attcatcttt cttttcaccc tagcctgact A ggcattgtat tagcaaatc atcactagac atcgtactac acgacacgta ctagcttgta gcccactgcg ggggaaatgc taggcgctg cttgcgggtg gccccgcgc ccgggagcgc acagcaatgc agggccttaa cattaccccc gagcagttct ctcggctgct gcgggaccac aacctgacgc gggagcagtt catcgctctg taccgggtgc gaccgctcgt ctacacccca gagctgccg gacgcgcaa gctggccctc gtgctcaccc gcgtgctcat cttcgccctg gcactctttg gcaatgtctc ggtgttctac gtggtgacct gcagcaaggc catgcgcacc gtcaccaca tctttatctg ctcccttgcg ctcagtgacc tgcctcatc cttcttctg	Homo sapiens

510 160314 G Protein- ENSMPRT2217 53
 Coupled
 Receptor
 GPR103

Homo
 sapiens

attcccgctca ccattgtcca gaacatttcc gacaactggc tgggggggtgc tttcatttgc
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 MKIKYDFLYE KEHICCLEW TSPVHQKIY TFILVILFL PLMVMLILYS KIGYELWIKK P
 RVGDGSLRT IHGKEMSKIA RKKRAVIMM VTVALFVAV WAPFHVHMM IEYSNFEKEY
 DDVTIKMIFA IVQIIIGFSNS ICNPIVYAFM NENFKKNVLS AVCYICVNKT FSPAQRHNS
 GITMRRKKAK FSLRENPEE TKGEAFSDGN IEVKLCEQTE EKKKLKRHLA LFRSELAENS
 PLDSG

511 160317 Neuropeptide NM_004885
 FF 2
 Receptor

Homo
 sapiens

tctggagcca agtaatgggtg atactgatgc ttccttttct ttgccgcgct cggatttctga A
 gtttcacaag aatgtacctg ggtgccctt agcgggatat gaatagcttc ttcggaaccc
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 tcttcagggc tgcagttcct cacacaggca ggaagaacca ggagcagtg cactgtgtgt
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Accession	Protein	Gene	Species	Sequence
512	160317 Neuropeptide FF 2 Receptor	NP_004876.1	Homo sapiens	catgtgtgcc cctgtggact ctaatgatgc tctcagacta cgctgacctt tctccaaatg aactgcagat catcaacatc tacatctacc cttttgcaca ctggctggca ttcggcaaca gcagtgtcaa tcccatcatt tatgttttct tcaacagaaa gagcaaaagg tatggaagct tataccctaa aagctttcca gctccagctc tgccaaaaaa gacaaagcc tatggaagct tataccctaa aagctaaaag ccatgtgtct ataacacat ctaatcagct tgtccaggaa tctacatttc aaaaccctca tggggaaacc ttgtttata ggaagaagtc tgaaaaaccc caacaggaaat tagtgatgga agaattaaaa gaaactacta acagcagtga gatttaaaaa gagctagtgt gataatccta actctactac gcattatata tttaaattcca ttgttttttg tggctttgca cttcaaattt ttcaagaagt gttctaaata aaacattttac tgaaagccct ctctggcaca aaaattaaaa ataaacaaa atggtcataa gatcataaac atctttatgt tgtataaaaa tacgtagagt gacttagaca tgtttgcatg aataaatata tttctagaga acagttaaaa aaaaaaaaa aaaaaa MNSFFGTPAA SWCLLESDVS SAPDKEAGRE RRALSVOQRG GPAWSGSLEW SRQSAGDRRR P LGLSRQTAKS SWSRSRDRTC CCRRAWILV PAADRARRER FIMNEKWDTN SSENWHPIWN VNDTKHLLYS DINTYVNY LHQPQVAIF IISYFIFLFL CMMGNTVVCV IVMRNKHMHT VTNLFILNLA ISDLLVGIFC MPITLDNII AGWPFGTMC KISGLVQGIS VAASVFLLVA IAVDRFQCVV YPEPKLTIK TAFVIIMIIV VLATIMSPK AVMLHVQEEK YYRVRLNSQN KTSPLYWCRE DWPNQEMRKI YTTVLEANIY LAPLSLIVIM YGRIGISLFR AAVPHYGRKN QEWHVVSRK KQKIKMLLI VALLFILSWL PLWTLMMLSD YADLSPNELQ IINIYIYFPA HWLAFGNSSV NPIIYGFNE NFRRGFQEAF QLQLCQKRAK PMEAYTLKAK SHVLINTSNQ LVQESTFQNP HGETLLYRKS AEKPPQQLVM EELKETNSSE EI aacagtatatt tccitttcaa cacatctatt gaaagtgttg gataaatgca ggatgttaat A atgctataaa cataaagtct gtttttaaaa aatagcatttt gaaaaatcatg aagggcctttt tgttttcttt tgtttgtata tatgtttatt ggtaacaggt gacactggaa gcaatgaaca ccacagtgat gcaagcttc aacagatctg agcgggtgccc cagagacact cggatagtagc agctgtgatt cccagccctc tacacagtgg ttttcttgac cggcatcctg ctgaataactt tggctctgtg ggtgtttgtt cacatcccca gctcctccac cttcatcctc tacctcaaaa acactttggt ggccgacttg ataatagcac tcatgtcttc ttcataaaatc ctctctgact cacactggc accctggcag ctccagagctt ttgtgtgtcg tttttcttcg gtgatatattt atgagaccat gtatgtgggc atcgtgtcgt tagggctcat agcctttgac agattcctca agatcatcag acctttgaga aatatatttc taaaaaaacc tgtttttgca aaaacggtct caatcttcat ctggttcttt ttgttcttca tctccctgcc aaatatgac ttgagcaaca aggaagcaac accatcgtct gtgaaaaagt gtgcttctctt aaaggggctt ctggggctga aatggcatca aatggtaaat aacatatgcc agtttatatt ctggactgtt ttatctctaa tgcttgtgtt ttatgtggtt attgcaaaaa aagtatata tgcttataga aagtcacaaa gtaaggacag aaaaaaac aaaaagctgg aaggcaaaagt atttgtgtc gtggctgtct tctttgtgtg ttttgctcca tttcatattt ccagagtctc atatactac agtcaaacca acaataagac tgactgtaga ctgcaaaatc aactgtttat tgctaaaaga acaactctct ttttggcagc aactaacatt tgatggatc ccttaatatata catattctta tgtaaaaaat tcacagaaaa gctaccatgt atgcaagggga gaaagaccac agcatcaagc caagaaaaatc atagcagtcac gacagacaaac ataactttag gctgacaaact gtacataggg ttaacttcta
513	160324 G Protein-Coupled Receptor GPR86/GPR94/P2Y13	NM_023914	Homo sapiens	

514	160324	G. Protein- Coupled Receptor GPR86/GPR94/ P2Y13	NP_076403.1	<p> tttattgatg agacttcggt agataatgtg gaaatcaaat ttaaccaaga aaaaaagatt ggaacaaatg ctctcttaca tttattatc ctggtgtaca gaaagatta tataaaattt aaatccacat agatctattc ataagctgaa tgaaccatta ctaagagaat gcaacaggat acaaatggcc actagaggtc attatttctt tctttctttt tttttttttt aatttcaaga gcatttcaat ttaacatttt ggaaagagct aaggagaaac gtatatccct acaaacctcc cctccaaaca cttctcaca tcttttcca aacactacat aacactactg cttttgtgcc ccttaaatgt agatatgtgc tgaagaaaa aaaaaacgac aactcttga agtccattgc tgaaaactgc agccagggtg tgaaggagat gcagacttga agagtctgag gaactgaagt gggtcagcaa gacctctgaa atcctgggta aaggattttc tccctacaat tacaacagc ctctttcaca ttacaataat ataccatagg aggcacaagc accattatta agccactttg cttacacctt aagtgtgtac aattcaagtg tgagaatgct gtgttaacta tcttttgaa ttctccttct gtccagcaaa tactctaag atggttaaac atggcaccta ctcagcaatg ccttccctgga ccacaacccc tatccccctg cccacccctc ctcattaaaa acaaatactt ctactgtttg ggtgtgtgat aggtttctca atgcagatct cctttttcta gttagctata ttcttgactg catccgctaa aaatgttaaa gcttcttgag agacagacat gccagatttt cttggtatct ccataatac gacctacagt ccatggtcta cagatgtttt aaatagaatt gctattctcg atacatacaa agactaatt gctgacccac aatcagtaac atccatattg ggagattttt caaaggatgg tgacctgtct tgtatttatt taccttggtg ttttttcttg catccttctg tgattcaaaa agtataaatg tggctttctg aaatgatgga taagagtcta catcttctag aaaaaataca taaaggagta gttaaagctct gtaaatgtgc cagagctcc aacacagacca tcgtagggtg aagccacagt tttcttccat ggcctcaaa ggcctagaac ttgctacact ttctggcctt acctcctagc tacttatacc tctcttgaac tttatactct tgtataaatt tctaaacttc agaaaatgcc atactctgtt ttggcaccac acatgtatat ttccccctgg tacacttggg agactcttat ccactcttga accctatgt tgtcatcact tgggtccatga aatattacct ggccaatata ccactatcac ctcaaaccca atcacccct cctctgtatg ctgtcacacc tatattatta aacttatcac attgcatgtt aattacttcc tgacctttgt atctactctt ttagtaactg atgtatatat ctgaaaggag agattgtttc attgtgcaat caataaatgt ttgataaaaat aaagccc LKNTLVADLI MNTVMQGFN RSERCPDTR IVQLVFPALY TVVFLTGILL NTLALWVVFH IPSSTFIY P FLKIIRPLRN IFLKKPVFAK SDSHLAPWQL RAFVCRFSSV IFYETMYVGI VLLGLIAFDR GLKWHQMVNN ICQFIFWTVF ILMLVFYVVI AKKYDSYRK SKSKDRKNK KLEGKVFVV AVFFVCFAPF HEARVPYTHS QTNKTDCLR QNQLFIKET TLFLAATNIC MDPLIYIFLC KKFTKLPCM QGRKTTASSQ ENHSSQTDNI TLG </p>	Homo sapiens
515	160329	Proteinase- Activated Receptor 4	NM_003950	<p> ctccacagg ctggctggca agcgccctg gtgggtctgc gggggcagg gacgcttcc A tggtttatct ccacggcgc gatctgctg tccgctcgg ctccagaagc tggggctcag ggtccggcga ggcaggagc ctgaggccac agccagagc agcctgagt cagtcattgtg ggggagactg ctctctgtgc ccttggtgct ggggttcagc ctgtctggcg gcacccagc cccagcgtc tacgacgaga gcggagcac cggagggtg gatgacagca cgcctcaat cctgcctgcc cccggggt acccaggcca agtctgtgcc aatgacagt acacccctga gctcccgac agtcacggg cactgcttct gggctgggtg cccaccaggc tgggtgcccc </p>	Homo sapiens

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516

160329 Proteinase-
Activated
Receptor 4

NP_003941.1

Homo
sapiens

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517 160330 G Protein-
Coupled-
Receptor
TM7XN1/GPR56

NM_005682

Homo
sapiens

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520	160387	Glucagon-Like Peptide 2 Receptor	NP_004237.1	<p> ggagaagtga aggtgagct gcggaatac tgggtccgct tcttgtagc cgcacactca ggctgcagag cctgtgtcct ggggaaggac tccggttcc taggaaatg tcccaagaag ctctcggaag gagatggcgc tgagaagctt cggaaagctg agcctcact taacagtggg cggctcctac atctagccat gcgaggtctt ggggagctgg gcgcccagcc ccaacaggac catgcacgct ggcgccggg cagcagcctg tccgagtgca gtgaggggga tgtcaccatg gccaacacca tggaggagat tctggaagag agtgagatct ag MKIGSSRAGP GRGSAGLLPG VHELPMGIPA PWGTFPLSFH RKCSLWAPGR PFLTLLVLLVS P IKQVTGSLLE ETTRKWAQYK QACLRDLIKE PSGIFCNLTF DQYVCWPHSS PGNVSVPCPS YLPWSEESS GRAYRHCLAQ GTWQTENAT DIWQDDSECS ENHSFKQNV D RYALLSTLQL MYTVGYSFSL ISLFLALTLL LFLRLHCTR NYIHMNLFAS FILRLAIVL KDWVFYNSYS KRPDNENGWM SYLSEMSSTSC RSVQVLLHYF VGANYLWLLV EGLYHLTLE PTVLPERRLW PRYLLGWAF PVLFVVPWGF ARAHLENTGC WTTNGNKKIW WIIRGPMMLC VTNVFFIFLK ILKLLISKLK AHQMCFRDYK YRLAKSTLVL IPLLGVHEIL FSEITDDQVE GFAKLIRLFI QLTSSFHGF LVALQYGFAN GEVKAELRKY WVRFLARHS GCRACVLGKD FRFLGKCPKK LSEGDGAELK RLQPSLNSG RLLHLAMRGL GELGAQPQQD HARWPRGSSL SECSEGDVTM ANTMEEILEE SEI </p>	Homo sapiens
521	160388	Latrophilin-1	NM_014921	<p> ttttttttt ttttttctt aatttttggg cggcggcggt gctggggccag gggaaaggaag A ggacacggag gccgccctcg tcccgccacc tccctaccgc tccccccag ccccgctcc ggagatgtg ccggcgggg ggcccggtt cgcgagcgc caggagagac acgctgggct gacccagag aggcgtgga caggctggtg gtccaggcgc tgggtcctgc caggtgatgt ggggcaaac ccccgccaca ggcactgag agctccggac acgacccgg ctgccaccat ggccgccta gccgcagtgc tctggaatct gtgtgtcacc gccgtcctgg tcacctggc caccacagg ctagccggg ccgggtccc gttcgggctg atgcgccgg agctggcgtg tgaaggctac cccatcgag cgcggtccc cggcagcgc gtcatcatgg tggagaatgc caactacgg cgcacggacg acaagattg cgtgctgac ctttccaga tggagaatgt gcagtgtac ctgccggacg cttcaagat catgtcacag aggtgtaaca accgaccca gtcgtggtg gtcgccggt cggatgcctt tcccgaccc tgcctggga cctacaagta cctggagggt cagtaagct gtgtccccta caaagtggag cagaaagtct tctgtgtgcc agggaccctg cagaaggtgc tggagccac ctcgacacac gactcagagc accagtctgg cgcagtgtgc aaggacccgc tgcaggcggg tgaccgcac tacgtgatgc cctggatccc ctaccgcac gacacactga ctgagtatgc ctaaccgctt ctcgtgggag gactacgtgg ccgccccca caccaccac taccgctgc caaacgctg caacatgctc aagtatgacc tacggacgcg tgccgtcttc tacaacaagg agcgcacgcg caacatgctc aagtatgacc tacggacgcg catcaagagc ggggagacgg tcatcaatc cgcacaact catgacacct cgcctacccg ctggggcgga aagaccgaca ttgacctggc ggtggacgag aacgggctgt ggtcatcta cgccactgag ggcaacaacg ggcggttacc caagcgtcgc gcatccaacg ccttcattgt ctttgagggc acgtgggaga cgggttacc caagcgtcgc gcatccaacg ccttcattgt gtgtggggc ctgtacgtcc tgcgctcctg tgcgctcctg gatgacagc aggcgctgg caaccgcgtg gactatgcct tcaacaccaa tgccaacgc gaggagcctg ttagcctcac ctccccac cctaccagt tcatctctc cgttgactac aacctcgcg acaaccagct gtacgtctgg acaactatt tctgtgtgog ctacagcctg gacttcggc gcgccgaccc </p>	Homo sapiens

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523	160390 Cadherin EGF NM_001408 LAG Seven- Pass G-Type Receptor 2 (CELSR2)	<p>NGVVKVVFIL YNGLGLFST ENATVKLAGE AGPGGPGGAS LVNNSQVIAA SINKESSRVF</p> <p>IMDPVIFTVA HLEDKNHENA NCSEFWYSEY SMLGYWSTQG CRLVESNKTTH TTCACSHLTN</p> <p>FAVLMAHREI YQGRINELL SVITWVGIVI SLVCLAICIS TFCFLRGLQT DRNTIHKNL</p> <p>INFLAELLF LVGIDKTQYE IACPIFAGLL HYFFLAASF LCLEGVHLYL LLVEVFESEY</p> <p>SRTKYYILGG YCFPALVGI AAIDYRSYG TEKACWLVRD NYFIWSFIGP VSFVIVVNLV</p> <p>FLMVTLHKMI RSSSVLKPD S RLNDIKSWA LGAIALLFLF GLTWAFGLLF INKESVVMAY</p> <p>LFTTFNAFQG VFIFVHCAL QKKVHKEYSK CLRHSYCCIR SPGGTHGSL KTSAMRSNTR</p> <p>YYGTQSRIR RMNDTVRKQ TESSFMAGDI NSTPTLNRT MGNHLLTNPV LQPRGGTSPY</p> <p>NTLIAESVGF NPSSPPVFN PGSYREPKHP LGREACGMD TLPLNGNFNN SYSLRSGDFP</p> <p>PGDGGPEPPR GRNLADAAAF EKMIISELVH NNLRGSSAA KGPPEPPPV PPVPGGGGEE</p> <p>EAGGPGGADR AEIELLYKAL EEPILLPRAQ SVLYQSDLDE SESCDAEDGA TSRPLSSPPG</p> <p>RDSLYASGAN LRDSPSYPDS SPEGPSEALP PPPAPPAPP EIIYTSRPPA LVARNPLQGY</p> <p>YQVRRPSHEG YLAAPGLEGP GPDGDGMQL VTSL</p>	A	Homo sapiens
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708	130	5-HT1E Receptor	P28566	2739	RIYHAAKSLYQKRGSSR	Homo sapiens
709	131	5-HT1F Receptor	P30939	604	ESGEKSTKSVSTSVVL	Homo sapiens
710	131	5-HT1F Receptor	P30939	606	DKCKISEEMSNFLAWLG	Homo sapiens
711	131	5-HT1F Receptor	P30939	864	IAKEEVNGQVLLESGE	Homo sapiens
712	131	5-HT1F Receptor	P30939	869	STVRSRSEFKHEKSWR	Homo sapiens
713	132	5-HT2A Receptor	CAA01675.1	1106	DAFNWTVDSNRINLSC	Homo sapiens
714	132	5-HT2A Receptor	CAA01675.1	1107	FGLQDDSKVKEGSC	Homo sapiens
715	132	5-HT2A Receptor	CAA01675.1	1108	PGSYTGRRTMQSISNEQKAC	Homo sapiens
716	132	5-HT2A Receptor	CAA01675.1	1109	CSMVALGKGHSEEAQKNSD	Homo sapiens
717	132	5-HT2A Receptor	CAA01675.1	1110	NTIPALAYKSSQLQMGQ	Homo sapiens
718	133	5-HT2B Receptor	P41595	1111	KGIEDVDNPNNTIC	Homo sapiens
719	133	5-HT2B Receptor	P41595	1112	CSSPEKVAMLDGSRKDKA	Homo sapiens
720	133	5-HT2B Receptor	P41595	1113	RRTSTIGKKSVQTISNE	Homo sapiens
721	133	5-HT2B Receptor	P41595	1114	CNYRATKSVKTLRKSSK	Homo sapiens
722	133	5-HT2B Receptor	P41595	1187	SGLQTESIPEEMKQIVEEQG	Homo sapiens
723	134	5-HT2C Receptor	P28335	1115	CKRNTAEENSANPNQDQNA	Homo sapiens
724	134	5-HT2C Receptor	P28335	1116	GHTEEPGLSLDLKLC	Homo sapiens
725	134	5-HT2C Receptor	P28335	1117	CNYKVEKKPPVRQIPRV	Homo sapiens
726	134	5-HT2C Receptor	P28335	1118	IGLRDEEKVFVNNTIC	Homo sapiens

727	134	5-HT2C Receptor	P28335	1119	RHNEPVIEKASDNEP	Homo sapiens
728	134	5-HT2C Receptor	NP_000859.1	1826	RNAVHSLVHLIGLLVWQCD	Homo sapiens
729	134	5-HT2C Receptor	NP_000859.1	1829	CDISVSPVAIVTDIFNTSD	Homo sapiens
730	134	5-HT2C Receptor	NP_000859.1	1830	DGGRFKPDGVQNWPAALS	Homo sapiens
731	136	5-HT4 Receptor	CAA73107.1	654	NNIGIDLIEKRKFNQ	Homo sapiens
732	136	5-HT4 Receptor	CAA73107.1	655	ESRQSSADQHSIHRMR	Homo sapiens
733	136	5-HT4 Receptor	CAA73107.1	656	CDDERYRRPSILGQTVP	Homo sapiens
734	136	5-HT4 Receptor	CAA73107.1	657	RDAVECGGQWESQCHPPATS	Homo sapiens
735	136	5-HT4 Receptor	CAA73107.1	2682	VTAKEHAHQIQLQIRAGASSESRP	Homo sapiens
736	136	5-HT4 Receptor	CAA73107.1	2683	KSFRRAFLIILCCDDE	Homo sapiens
737	136	5-HT4 Receptor	CAA73107.1	2684	VTAKEHAHQIQLQIRAGA	Homo sapiens
738	136	5-HT4 Receptor	CAA73107.1	2685	KEHAHQIQLQIRAGA	Homo sapiens
739	136	5-HT4 Receptor	CAA73107.1	2686	VTAKEHAHQIQLQIR	Homo sapiens
740	138	5-HT6 Receptor	P50406	649	RTPRPGVESADSRRLATK	Homo sapiens
741	138	5-HT6 Receptor	P50406	650	CPRERQASLASPSLRIS	Homo sapiens
742	138	5-HT6 Receptor	P50406	652	PLFMRFKRALGRFLPC	Homo sapiens
743	138	5-HT6 Receptor	P50406	653	RAAAAVNFFNIDPAEPE	Homo sapiens
744	139	5-HT7 Receptor	P34969	658	EVTASPTWDAPPDNASGC	Homo sapiens
745	139	5-HT7 Receptor	P34969	659	KAARKSAAKHKFGPRVE	Homo sapiens
746	139	5-HT7 Receptor	P34969	660	CANLSRLKHERKNISIFKR	Homo sapiens
747	139	5-HT7 Receptor	P34969	663	KLAERPERPEFVLKAC	Homo sapiens
748	272	Adenosine A1 Receptor	AAA17544.1	8	CHKPSILTYAIFLT	Homo sapiens
749	272	Adenosine A1 Receptor	AAA17544.1	9	NGSMGEPVKEFEKVISME	Homo sapiens
750	272	Adenosine A1 Receptor	AAA17544.1	10	NKKVSASSGDPQKYVGKELK	Homo sapiens
751	272	Adenosine A1 Receptor	AAA17544.1	11	NDHFRCQAPPIDEDLPEER	Homo sapiens
752	272	Adenosine A1 Receptor	P25099	286	CQPKPIDEDLPEEKAD	Rattus norvegicus
753	272	Adenosine A1 Receptor	P25099	302	QPKPIDEDLPEEKAD	Rattus norvegicus
754	272	Adenosine A1 Receptor	AAA17544.1	303	MPPSISAFQAAVIGIEVJ	Homo sapiens
755	273	Adenosine A2a Receptor	P29274	1237	QGNITGLPDVELLSHELKGV	Homo sapiens
756	273	Adenosine A2a Receptor	P29274	1238	MPIMGSSVYITVELAIA	Homo sapiens
757	273	Adenosine A2a Receptor	P29274	1239	RSHVLRQQEPEFKAAGT	Homo sapiens
758	273	Adenosine A2a Receptor	P11617	1240	RIRFRQTRFKIIRSH	Canis familiaris
759	274	Adenosine A2b Receptor	P29275	676	KDSATNNCTEPWDGTTNES	Homo sapiens
760	274	Adenosine A2b Receptor	P29275	677	CRQLQRTELMDHSRTLQRE	Homo sapiens
761	274	Adenosine A2b Receptor	P29275	678	RNRDFRYTFHKISRYLLC	Homo sapiens
762	274	Adenosine A2b Receptor	P29275	679	CQADVKSNGQAGVQVP	Homo sapiens

763	274	Adenosine A2b Receptor	P29275	680	CVTLFQPAQGKPKW	Homo sapiens
764	274	Adenosine A2b Receptor	P29275	2714	MLLETQDALYVALELVIAAL	Homo sapiens
765	275	Adenosine A3 Receptor	P33765	683	IFYIRNKLNLNSKE	Homo sapiens
766	275	Adenosine A3 Receptor	P33765	686	NMKLTSEYHRNVTLSC	Homo sapiens
767	275	Adenosine A3 Receptor	P33765	687	AYKIKFKETYLLILKAC	Homo sapiens
768	275	Adenosine A3 Receptor	P33765	689	TGAFYGREFTAKSLF	Homo sapiens
769	275	Adenosine A3 Receptor	P33765	2296	KRVTTTHRRIWALGLC	Homo sapiens
770	309	Melanocortin 2 Receptor (adrenocorticotrophic hormone) (MC2R)	CAA46587.1	4	CPRVLPPEIFFTIS	Homo sapiens
771	309	Melanocortin 2 Receptor (adrenocorticotrophic hormone) (MC2R)	CAA46587.1	5	MGYLKPRGSFETTADDIIDS	Homo sapiens
772	309	Melanocortin 2 Receptor (adrenocorticotrophic hormone) (MC2R)	CAA46587.1	6	RYHSIVIMRRRTVVLT	Homo sapiens
773	309	Melanocortin 2 Receptor (adrenocorticotrophic hormone) (MC2R)	CAA46587.1	7	AFRSPELRDAFKKMIFC	Homo sapiens
774	376	Alpha 1d-adrenoceptor	AAA35496.1	12	RSTRSLEAGVKRERKASE	Homo sapiens
775	376	Alpha 1d-adrenoceptor	AAA35496.1	13	KEVPVPDEIRFCGITEEAG	Homo sapiens
776	376	Alpha 1d-adrenoceptor	AAA35496.1	14	RSTEMVQRLRMEAVQ	Homo sapiens
777	376	Alpha 1d-adrenoceptor	AAA35496.1	15	PRPSCAPKSPACRTRSP	Homo sapiens
778	377	Alpha 1b-adrenoceptor	P35368	696	KEMSNKELTLRIHSK	Homo sapiens
779	377	Alpha 1b-adrenoceptor	P35368	697	GGSLERSQSRKDSLDGSGC	Homo sapiens
780	377	Alpha 1b-adrenoceptor	P35368	698	APEPPGRRGRHDSGPL	Homo sapiens
781	377	Alpha 1b-adrenoceptor	P35368	699	KLLTEPESPGTDGGASNGGC	Homo sapiens
782	379	Alpha 1c-adrenoceptor	AAA93114.1	1245	GSGMASAKTKHFSVR	Homo sapiens
783	379	Alpha 1c-adrenoceptor	AAA93114.1	1246	RIPVGSRETFYRISKTDGVC	Homo sapiens
784	379	Alpha 1c-adrenoceptor	AAA93114.1	1247	SSMPRGSARITVSKDQSSC	Homo sapiens
785	379	Alpha 1c-adrenoceptor	AAA93114.1	1248	ESRGLKSGLTKDKSDS	Homo sapiens
786	387	Alpha 2a-adrenoceptor	P08913	1343	ERRPNGLGPERSAAGPG	Homo sapiens
787	387	Alpha 2a-adrenoceptor	P08913	1344	PGEAPAGPRDIDALD	Homo sapiens
788	387	Alpha 2a-adrenoceptor	P08913	1345	RGPRGKGKARASQVKPGD	Homo sapiens
789	387	Alpha 2a-adrenoceptor	P08913	1346	RPGATGIGTPAAGPGE	Homo sapiens
790	387	Alpha 2a-adrenoceptor	P08913	1347	RVGAAKASRWGRQNRE	Homo sapiens
791	388	Alpha 2b-adrenoceptor	P18089	1348	YKGDQGPQPRGRPQC	Homo sapiens

792	388	Alpha 2b-adrenoceptor	P18089	1349	RSNRRGPRAKGGPGQGE	Homo sapiens
793	388	Alpha 2b-adrenoceptor	P18089	1350	ASAREVNGHSKSTGEK	Homo sapiens
794	388	Alpha 2b-adrenoceptor	P18089	1351	RGVGAIGGQWRRRAH	Homo sapiens
795	389	Alpha 2c-adrenoceptor	P18825	1352	RAPVGPDGASPTENG	Homo sapiens
796	389	Alpha 2c-adrenoceptor	P18825	1353	RTGTARPRPPTWSRTR	Homo sapiens
797	389	Alpha 2c-adrenoceptor	P18825	1354	ASRSPGPGGRLSRASS	Homo sapiens
798	389	Alpha 2c-adrenoceptor	P18825	1355	RSVEFFLSRRRRARSSVC	Homo sapiens
799	599	Bradykinin B1 Receptor	P46663	798	PMASGRQQRRRQARVTC	Homo sapiens
800	599	Bradykinin B1 Receptor	P46663	799	NYHILASLRTREEVSR	Homo sapiens
801	599	Bradykinin B1 Receptor	P46663	800	RVRGPKDSKTTALILT	Homo sapiens
802	599	Bradykinin B1 Receptor	P46663	801	VGRLFRTKVWELYKQC	Homo sapiens
803	600	Bradykinin B2 Receptor	AAB02793.1	794	FRIMKEYSDEGHNVTC	Homo sapiens
804	600	Bradykinin B2 Receptor	AAB02793.1	795	CTMQIMQVLRNNEMQKKE	Homo sapiens
805	600	Bradykinin B2 Receptor	AAB02793.1	796	CQDERIDVITQIASFM	Homo sapiens
806	600	Bradykinin B2 Receptor	AAB02793.1	797	CRSEPIQMENSMTLRTS	Homo sapiens
807	635	Beta-1 adrenoceptor	AAA51667.1	1357	RVFREAGQKQVKKIDSC	Homo sapiens
808	635	Beta-1 adrenoceptor	AAA51667.1	1358	CERRFLGGPARPPSPS	Homo sapiens
809	635	Beta-1 adrenoceptor	AAA51667.1	1359	ANGRAGKRPSRLVALRE	Homo sapiens
810	635	Beta-1 adrenoceptor	AAA51667.1	1360	CARRAARRRHATHGDRPRAS	Homo sapiens
811	635	Beta-1 adrenoceptor	AAA51667.1	1361	CLARPGPPSPGAASD	Homo sapiens
812	635	Beta-1 adrenoceptor	AAA51667.1	1362	CNGGAAADSDSLDEP	Homo sapiens
813	640	Beta-2 adrenoceptor	NP_000015.1	2654	KRQLQKIDKSEGRFHV	Homo sapiens
814	640	Beta-2 adrenoceptor	NP_000015.1	2656	GEQSGYHVEQEKENKLLC	Homo sapiens
815	640	Beta-2 adrenoceptor	NP_000015.1	2662	APNRSHAPDHDVTQQR	Homo sapiens
816	640	Beta-2 adrenoceptor	NP_000015.1	2663	VPLVIMFVVSRYFQE	Homo sapiens
817	643	Beta-3 adrenoceptor	P13945	1390	RGELGRFPPEESPAP	Homo sapiens
818	643	Beta-3 adrenoceptor	P13945	1391	SRLAPAPVGTCAPE	Homo sapiens
819	643	Beta-3 adrenoceptor	P13945	1392	GVPACGRRPARLLPLRE	Homo sapiens
820	643	Beta-3 adrenoceptor	P13945	1393	PSGVPAARSSPAQPRLC	Homo sapiens
821	688	Opsin, blue-sensitive	NP_001699.1	1753	EEFYLFKNISSVGPWDGPQ	Homo sapiens
822	688	Opsin, blue-sensitive	NP_001699.1	1754	CGPDWYTVGKYRSESYT	Homo sapiens
823	688	Opsin, blue-sensitive	NP_001699.1	1755	NNRNHGLDLRLVTIPS	Homo sapiens
824	688	Opsin, blue-sensitive	NP_001699.1	1756	IMKMVCGKAMTDESDT	Homo sapiens
825	692	Bombesin Receptor	AAA35604.1	20	SITNDTESSSVVSDNTNK	Homo sapiens
826	692	Subtype-3				
		Bombesin Receptor	AAA35604.1	21	KAVVKPLERQPSNAILKTC	Homo sapiens
		Subtype-3				

827	692	Bombesin Receptor Subtype-3	AAA35604.1	22	RDPNKNMTFESCTSPVSKK	Homo sapiens
828	692	Bombesin Receptor Subtype-3	AAA35604.1	23	RTLYKSTLNIPTEEQSHARK	Homo sapiens
829	692	Bombesin Receptor Subtype-3	AAA35604.1	24	KSFQKHFKAQILFCKAERPE	Homo sapiens
830	692	Bombesin Receptor Subtype-3	NP_001718.1	2286	NKGWSGDNSPGIEALC	Homo sapiens
831	692	Bombesin Receptor Subtype-3	NP_001718.1	2287	QRQPHSPNQTLISITNDTE	Homo sapiens
832	692	Bombesin Receptor Subtype-3	NP_001718.1	2288	RPEPPVADTSLTLAV	Homo sapiens
833	692	Bombesin Receptor Subtype-3	NP_001718.1	2289	SEISVTSFTGCSVKQAEDR	Homo sapiens
834	729	CXC Chemokine Receptor 5	P32302	1382	ELDRLDNYNDTSLVENHLC	Homo sapiens
835	729	CXC Chemokine Receptor 5	P32302	1383	SGGHHNSLPRCTFSQE	Homo sapiens
836	729	CXC Chemokine Receptor 5	P32302	1384	CYGVVHRLRQAQRRP	Homo sapiens
837	729	CXC Chemokine Receptor 5	P32302	1385	CQLFPSWRRSSLESENA	Homo sapiens
838	735	C-C Chemokine Receptor 1	P32246	305	TEDYDTTEFDYGDATPC	Homo sapiens
839	735	C-C Chemokine Receptor 1	P32246	1242	ASMPGLYFSKTQWEFTHTC	Homo sapiens
840	735	C-C Chemokine Receptor 1	P32246	1243	CSLHFPHESLREWKLFQA	Homo sapiens
841	735	C-C Chemokine Receptor 1	P32246	1244	TILISVFQDFLTHEC	Homo sapiens
842	737	C-C Chemokine Receptor 3	P51677	1386	CSALYPEDTVYSWRHF	Homo sapiens
843	737	C-C Chemokine Receptor 3	P51677	1387	PEFIFYETEELFEETLC	Homo sapiens
844	737	C-C Chemokine Receptor 3	P51677	1388	SSYQSILFGNDCERSK	Homo sapiens
845	737	C-C Chemokine Receptor 3	P51677	1389	GRYIFLPSEKLERIS	Homo sapiens
846	737	C-C Chemokine Receptor 3	P51677	1751	DDVGLLCEKADTRALMAQFV	Homo sapiens
847	738	C-C Chemokine Receptor 4	P51680	306	MNATEVTDITQDETIVNSW	Mus musculus
848	738	C-C Chemokine Receptor 4	P51679	348	DESIYSNYLYESIPKC	Homo sapiens
849	738	C-C Chemokine Receptor 4	P51679	351	DTPSSSYTGSTMDHDLHD	Homo sapiens
850	738	C-C Chemokine Receptor 4	P51679	353	LETLVELEVLDQCTFE	Homo sapiens
851	738	C-C Chemokine Receptor 4	P51679	491	RNHTYCKTKYSLNSTWK	Homo sapiens
852	741	C-C Chemokine Receptor 7	P32248	748	CQDEVTDYIGDNTVD	Homo sapiens
853	741	C-C Chemokine Receptor 7	P32248	846	PELLYSDLQSRSSSEQAMRC	Homo sapiens
854	741	C-C Chemokine Receptor 7	P32248	847	QLRQWSSCRHRRSSMSVE	Homo sapiens
855	741	C-C Chemokine Receptor 7	P32248	848	GVKFRNDILFKFKDLGC	Homo sapiens
856	742	C-C Chemokine Receptor 8	P51685	359	PDIFSSPCDAELUQTNG	Homo sapiens

857	742	C-C Chemokine Receptor 8	P51685	360	KILHLKRCQNHNKTKAIR	Homo sapiens
858	742	C-C Chemokine Receptor 8	P51685	362	SQIFNYLGRQMPRESC	Homo sapiens
859	742	C-C Chemokine Receptor 8	P51685	493	FVGEFKKHLSEIFQKSC	Homo sapiens
860	752	CXC Chemokine Receptor 3	P49682	1371	ENFSSSYDYGENESDSC	Homo sapiens
861	752	CXC Chemokine Receptor 3	P49682	1372	CYAHILAVLLVSRGQRRLRA	Homo sapiens
862	752	CXC Chemokine Receptor 3	P49682	1373	MVLEVSDHQVLNDAEVAALL	Homo sapiens
863	752	CXC Chemokine Receptor 3	P49682	1374	CPNQRGLQRQPSSRRD	Homo sapiens
864	753	CXC Chemokine Receptor 4	P30991	1376	TEEMGSGDYDSMIKEPC	Homo sapiens
865	753	CXC Chemokine Receptor 4	P30991	1377	KKLRSMTDKYRLHLSVAD	Homo sapiens
866	753	CXC Chemokine Receptor 4	P30991	1380	CIISKLSHSGHGKQKALK	Homo sapiens
867	753	CXC Chemokine Receptor 4	P30991	1381	KILSKGKRGGHSSVSTE	Homo sapiens
868	755	Complement Component 3a Receptor 1	AAC50657.1	25	ENRSLNIVQPPGEMINDRLD	Homo sapiens
869	755	Complement Component 3a Receptor 1	AAC50657.1	26	KIPSGFPIEDHETSPLDNSD	Homo sapiens
870	755	Complement Component 3a Receptor 1	AAC50657.1	27	RKKARQSIQIGILEAAFSEE	Homo sapiens
871	755	Complement Component 3a Receptor 1	AAC50657.1	28	PQTFQRPASDSLPRGSARLT	Homo sapiens
872	758	Complement Component 5a Receptor 1	P21730	811	DLNTPVDKTSNLTLPD	Homo sapiens
873	758	Complement Component 5a Receptor 1	P21730	812	CGVDYSHDKRRERAVAIVRL	Homo sapiens
874	758	Complement Component 5a Receptor 1	P21730	813	CYTFILLRTWSRRRATRSTK	Homo sapiens
875	758	Complement Component 5a Receptor 1	P21730	814	QGRLRKSLPSLLRNVLTE	Homo sapiens
876	767	Calcitonin Receptor-like Receptor	Q16602	841	AELEESPEDSIQLGVTR	Homo sapiens
877	767	Calcitonin Receptor-like Receptor	Q16602	843	EFVLIPWRPEGKIAEEV	Homo sapiens
878	767	Calcitonin Receptor-like Receptor	Q16602	844	RRNWNQYKIQFGNSFSNSE	Homo sapiens
879	767	Calcitonin Receptor-like Receptor	Q16602	845	RSASYTVSTISDGPYSHDC	Homo sapiens
880	832	Cannabinoid Receptor 1	AAB18200.1	29	NDIQYEDIKGDMSKLG	Homo sapiens
881	832	Cannabinoid Receptor 1	AAB18200.1	30	KENEENIQCCGENFMIDIE	Homo sapiens
882	832	Cannabinoid Receptor 1	AAB18200.1	31	EDGKVQVTRPDQARMDIR	Homo sapiens

883	832	Cannabinoid Receptor 1	AAB18200.1	32	CEGTAQLDNSMGDS	Homo sapiens
884	832	Cannabinoid Receptor 1	AAB18200.1	274	MKSILDGLADTFR	Homo sapiens
885	832	Cannabinoid Receptor 1	AAB18200.1	297	NKLSFKENEENIQC	Homo sapiens
886	833	Cannabinoid Receptor 2	CAA52376.1	33	KDGLDSNPMDYMLSGPQK	Homo sapiens
887	833	Cannabinoid Receptor 2	CAA52376.1	34	QDRQVPGMARMRLDVRLAKT	Homo sapiens
888	833	Cannabinoid Receptor 2	CAA52376.1	35	KEEAPRSSVTETADGK	Homo sapiens
889	833	Cannabinoid Receptor 2	CAA52376.1	36	RSGEIRSSAHCLAHWKCC	Homo sapiens
890	922	Leukocyte Antigen CD97	NP_001775.1	2644	GRDPPAKDVMPPRQELLC	Homo sapiens
891	922	Leukocyte Antigen CD97	NP_001775.1	2646	CSPGYEPVSGAKTFKN	Homo sapiens
892	922	Leukocyte Antigen CD97	NP_001775.1	2647	FSSFSEIITPTETC	Homo sapiens
893	922	Leukocyte Antigen CD97	NP_001775.1	2648	CRPGWKPRHGIPNNQK	Homo sapiens
894	922	Leukocyte Antigen CD97	NP_001775.1	2649	DGEAGRDPPAKDVMPPGR	Homo sapiens
895	922	Leukocyte Antigen CD97	NP_001775.1	2650	ANASNLHSHKKQAELE	Homo sapiens
896	922	Leukocyte Antigen CD97	NP_001775.1	2651	RLSAVNSIFLHNITKE	Homo sapiens
897	922	Leukocyte Antigen CD97	NP_001775.1	2652	KLTKQKFSEINPDMKKL	Homo sapiens
898	922	Leukocyte Antigen CD97	NP_001775.1	2680	KLVDLMEAPGDVEAL	Homo sapiens
899	922	Leukocyte Antigen CD97	NP_001775.1	2681	RFFDKVQDLGRDSKTS	Homo sapiens
900	941	EMR1 Hormone Receptor	Q14246	1180	RAEYLDIESKVINKEC	Homo sapiens
901	941	EMR1 Hormone Receptor	Q14246	2675	CVMHSEWEGHIRTPRKPTIK	Homo sapiens
902	941	EMR1 Hormone Receptor	Q14246	2677	CLLNGQVREEYKRWITGKTKP	Homo sapiens
903	941	EMR1 Hormone Receptor	Q14246	2678	CLLNGQVREEYKRWITGK	Homo sapiens
904	941	EMR1 Hormone Receptor	Q14246	2679	SGHLSCQGLKASCE	Homo sapiens
905	965	G Protein-Coupled Receptor GPR30	CAA67133.1	1183	GTALANGTGLSEHQ	Homo sapiens
906	965	G Protein-Coupled Receptor GPR30	CAA67133.1	1184	ADSUEVFNLHERYYD	Homo sapiens
907	965	G Protein-Coupled Receptor GPR30	CAA67133.1	1185	VRAHRHRLPRRQKA	Homo sapiens
908	965	G Protein-Coupled Receptor GPR30	CAA67133.1	1186	DKLRLVIEQKTNLPALNRF	Homo sapiens
909	978	Cholecystokinin A Receptor	P32238	820	AKERKPSTSSGKYEDSDGC	Homo sapiens
910	978	Cholecystokinin A Receptor	P32238	821	CYLQKTRPPRKLELRQ	Homo sapiens
911	978	Cholecystokinin A Receptor	P32238	822	SANAWRAYDTASAERR	Homo sapiens
912	978	Cholecystokinin A Receptor	P32238	823	CPNPGPPGARGEVEEEE	Homo sapiens
913	1103	Corticotropin releasing factor Receptor 2	Q13324	453	CEPILDDKQKRYDHYRIAL	Homo sapiens
914	1103	Corticotropin releasing	Q13324	502	QLVDHEVHESNEVWC	Homo sapiens

915	1103	factor Receptor 2	Q13324	505	DPEGPYSYCNITLDQIGTCW	Homo sapiens
916	1103	Corticotropin releasing factor Receptor 2	LR43	507	ALLEQYCHTITMLNLSG	Homo sapiens
917	1240	Dopamine Receptor D1	CAA41734.1	41	SSHHEPRGSISKEC	Homo sapiens
918	1240	Dopamine Receptor D1	CAA41734.1	42	KAKPTSPSDGNATSLAETID	Homo sapiens
919	1240	Dopamine Receptor D1	CAA41734.1	43	CSQPESFFKMSFKRE	Homo sapiens
920	1240	Dopamine Receptor D1	CAA41734.1	44	EDLKKEAAAGIARPLEK	Homo sapiens
921	1241	Dopamine Receptor D5	P21918	1407	PWEEDFWEPDVNAENC	Homo sapiens
922	1241	Dopamine Receptor D5	P21918	1408	CAPDTSURASIKKETK	Homo sapiens
923	1241	Dopamine Receptor D5	P21918	1409	PNAVTPGNREVDNDEE	Homo sapiens
924	1241	Dopamine Receptor D5	P21918	1410	QTSPDGDPAESVWELDC	Homo sapiens
925	1242	Dopamine Receptor D2	P14416	1403	KRSSRAFRALHRLAPLKGNC	Homo sapiens
926	1242	Dopamine Receptor D2	P14416	1404	CTVIMKSNNGSFPVNRVRV	Homo sapiens
927	1242	Dopamine Receptor D2	P14416	1405	KPEKNGHAKDHPKIAK	Homo sapiens
928	1242	Dopamine Receptor D2	P14416	1406	GKTRTSLKTMRRKLSQQKE	Homo sapiens
929	1243	Dopamine Receptor D3	P35462	1398	KQRRRKRLTRQNSQC	Homo sapiens
930	1243	Dopamine Receptor D3	P35462	1399	CNSVRPGFPQQTLSPDP	Homo sapiens
931	1243	Dopamine Receptor D3	P35462	1400	CQDTALGGPGFQERGGGE	Homo sapiens
932	1243	Dopamine Receptor D3	P35462	1401	KREEKTRNSLPTIAP	Homo sapiens
933	1243	Dopamine Receptor D3	P35462	1402	STSLKGLPLQPRGVPLRE	Homo sapiens
934	1244	Dopamine Receptor D4	P21917	1394	VAVAVPLRYNRQGGSR	Homo sapiens
935	1244	Dopamine Receptor D4	P21917	1395	EVARRAKLHGRAPRRP	Homo sapiens
936	1244	Dopamine Receptor D4	P21917	1396	PPSPTPPAPRLPQDPC	Homo sapiens
937	1244	Dopamine Receptor D4	P21917	1397	PPQTTPPQTRRRRAKITGRE	Homo sapiens
938	1267	Opiloid Receptor, delta 1 (OPRD1)	AAA18789.1	222	DAYPSAFPSAGANASGP	Homo sapiens
939	1267	Opiloid Receptor, delta 1 (OPRD1)	AAA18789.1	224	LVDIDRRDPLVVAALHLC	Homo sapiens
940	1267	Opiloid Receptor, delta 1 (OPRD1)	AAA18789.1	225	KRCFRQLCRKPCGRPD	Homo sapiens
941	1267	Opiloid Receptor, delta 1 (OPRD1)	AAA18789.1	226	SRPREATARERVATAC	Homo sapiens
942	1424	Duffy Antigen	AAC50055.1	1411	TENSSQLDFEDVWNSS	Homo sapiens
943	1424	Duffy Antigen	AAC50055.1	1412	NDSFPDGDYDANLEAAAPC	Homo sapiens
944	1424	Duffy Antigen	AAC50055.1	1413	CHASLGHRLGAGQVPG	Homo sapiens

945	1424	Duffy Antigen	AAC50055.1	1415	FGAKGLKKALGMGP	Homo sapiens
946	1451	EBV-Induced Gene 2	AAA35924.1	45	KGEAERITCMEYPNFEET	Homo sapiens
947	1451	EBV-Induced Gene 2	AAA35924.1	46	KLFRTAKQNPLTEKSGVNKK	Homo sapiens
948	1451	EBV-Induced Gene 2	AAA35924.1	47	KSAPEENSREMTETQM	Homo sapiens
949	1451	EBV-Induced Gene 2	AAA35924.1	48	CKGYKRKVMRMLKRQ	Homo sapiens
950	1486	Endothelin B Receptor	BAA14398.1	54	GEERGFPDRATPLLQTAE	Homo sapiens
951	1486	Endothelin B Receptor	BAA14398.1	55	RSLAPAEVPGDRTAGSP	Homo sapiens
952	1486	Endothelin B Receptor	BAA14398.1	56	PRTISPPCCQGPIEKE	Homo sapiens
953	1486	Endothelin B Receptor	BAA14398.1	57	EKQSLKQSLKFKAND	Homo sapiens
954	1488	Endothelin A Receptor	AAB25530.1	49	RYSINLSNHVDDFTFRGTE	Homo sapiens
955	1488	Endothelin A Receptor	AAB25530.1	50	NRRNGSLRIALSEHLK	Homo sapiens
956	1488	Endothelin A Receptor	AAB25530.1	51	EYRGEQHKTCMLNATSK	Homo sapiens
957	1488	Endothelin A Receptor	AAB25530.1	53	KNHDQNNHNTRSSHKD	Homo sapiens
958	1598	Calcium-Sensing Receptor (CASR)	P41180	1425	RPGIEKFREEAEERDIC	Homo sapiens
959	1598	Calcium-Sensing Receptor (CASR)	P41180	1426	CHLQEGAKGPLVDIFLR	Homo sapiens
960	1598	Calcium-Sensing Receptor (CASR)	P41180	1427	GHEESGDRFSNSSTAFRPLC	Homo sapiens
961	1598	Calcium-Sensing Receptor (CASR)	P41180	1428	KGIIEGEPTCCFECVECPDG	Homo sapiens
962	1598	Calcium-Sensing Receptor (CASR)	P41180	1429	CSTAAHAFKVAARATLRNSN	Homo sapiens
963	1598	Calcium-Sensing Receptor (CASR)	P41180	1430	PQKNAMAHNRNTHQNSLE	Homo sapiens
964	1598	Calcium-Sensing Receptor (CASR)	P41180	1431	RPEVEDPEELSPALVSSSQ	Homo sapiens
965	1676	Formyl Peptide Receptor-Like Receptor	NP_001453.1	1878	ASWGGTPEERLKVAITMLTA	Homo sapiens
966	1676	Formyl Peptide Receptor-Like Receptor	NP_001453.1	1879	SEDSAPTNDIAANSAS	Homo sapiens
967	1676	Formyl Peptide Receptor-Like Receptor	NP_001453.1	1880	SYESAGYTVLRILPLVVL	Homo sapiens
968	1676	Formyl Peptide Receptor-Like Receptor	NP_001453.1	1881	PVFLFTVTIPNGD	Homo sapiens
969	1676	Formyl Peptide Receptor-Like Receptor	NP_001453.1	2612	EERLKVAITMLTARGIIRFV	Homo sapiens
970	1676	Formyl Peptide Receptor-Like Receptor	NP_001453.1	2613	ERALSEDSAPTNDIAANSAS	Homo sapiens

971	1681	Like Receptor	Follicle Stimulating Hormone Receptor	AAA52477.1	58	QESKVTEIPSDLPRNAIELR	Homo sapiens
972	1681	Follicle Stimulating Hormone Receptor	Follicle Stimulating Hormone Receptor	AAA52477.1	59	DVLEVIEADVFSNLPK	Homo sapiens
973	1681	Follicle Stimulating Hormone Receptor	Follicle Stimulating Hormone Receptor	AAA52477.1	60	RNGHCSSAPRVTSGSTY	Homo sapiens
974	1681	Follicle Stimulating Hormone Receptor	Follicle Stimulating Hormone Receptor	AAA52477.1	61	RGQRSSLAEDNESSYRSGFD	Homo sapiens
975	1681	Follicle Stimulating Hormone Receptor	Follicle Stimulating Hormone Receptor	NP_000136.1	2231	CHHRICHCSNRVFLCQE	Homo sapiens
976	1681	Follicle Stimulating Hormone Receptor	Follicle Stimulating Hormone Receptor	NP_000136.1	2232	LRVIQKGAFSGFGDLEK	Homo sapiens
977	1681	Follicle Stimulating Hormone Receptor	Follicle Stimulating Hormone Receptor	NP_000136.1	2233	LYVMSLLVLNVLAFFVIC	Homo sapiens
978	1681	Follicle Stimulating Hormone Receptor	Follicle Stimulating Hormone Receptor	NP_000136.1	2234	CNKSILRQEVDMYTQARGQR	Homo sapiens
979	1681	Follicle Stimulating Hormone Receptor	Follicle Stimulating Hormone Receptor	NP_000136.1	2236	SDNNNLEELPNDVFHGA	Homo sapiens
980	1681	Follicle Stimulating Hormone Receptor	Follicle Stimulating Hormone Receptor	NP_000136.1	2238	KLVALMEASLTPSHC	Homo sapiens
981	1681	Follicle Stimulating Hormone Receptor	Follicle Stimulating Hormone Receptor	NP_000136.1	2241	SFESVILWLNKNGIQEIHNC	Homo sapiens
982	1681	Follicle Stimulating Hormone Receptor	Follicle Stimulating Hormone Receptor	NP_000136.1	2248	IHSLQKVLLDIQDNINIHT	Homo sapiens
983	1681	Follicle Stimulating Hormone Receptor	Follicle Stimulating Hormone Receptor	NP_000136.1	2250	KANNLLYTPEAFQNLP	Homo sapiens
984	1681	Follicle Stimulating Hormone Receptor	Follicle Stimulating Hormone Receptor	NP_000136.1	2251	CYEMQAAQIVRTETSTVH	Homo sapiens
985	1726	G Protein-Coupled Receptor RDC1	G Protein-Coupled Receptor RDC1	AAA62370.1	1437	TNTPSSRKMMVRRVVC	Homo sapiens
986	1726	G Protein-Coupled Receptor RDC1	G Protein-Coupled Receptor RDC1	AAA62370.1	1439	ARAIASDDQEKHSRK	Homo sapiens
987	1726	G Protein-Coupled Receptor RDC1	G Protein-Coupled Receptor RDC1	AAA62370.1	1440	KYSAKTGLTKLIDASRVSET	Homo sapiens
988	1726	G Protein-Coupled Receptor RDC1	G Protein-Coupled Receptor RDC1	AAA62370.1	1893	PDTYLLKTVTSASNNETYC	Homo sapiens
989	1762	Galanin Receptor GalR1	Galanin Receptor GalR1	AAA50767.1	192	GNSLVITVLARSPGKPR	Homo sapiens
990	1762	Galanin Receptor GalR1	Galanin Receptor GalR1	AAA50767.1	193	PRASNQITFCWEQWDPDRHKK	Homo sapiens

991	1762	Galanin Receptor GalR1	AAA50767.1	194	KKLKNMSKKSEASKKTAQ	Homo sapiens
992	1762	Galanin Receptor GalR1	AAA50767.1	195	GNSLVITV/LARSKP	Homo sapiens
993	1762	Galanin Receptor GalR1	AAA50767.1	196	RKDSHLSDTKENKSRID	Homo sapiens
994	1808	Gastric Inhibitory Polypeptide Receptor	P48546	1250	QTAGELYQRWERYRREC	Homo sapiens
995	1808	Gastric Inhibitory Polypeptide Receptor	P48546	1251	CENPEKNEAFILDQRULER	Homo sapiens
996	1808	Gastric Inhibitory Polypeptide Receptor	P48546	1253	CRLRRLSGEEQRQLPERAFR	Homo sapiens
997	1808	Gastric Inhibitory Polypeptide Receptor	P48546	1276	PTSRGLSSGTLPGPGNEA	Homo sapiens
998	1813	Gastrin-Releasing Peptide Receptor	P30550	829	CNISSHSADLPVNDWHPG	Homo sapiens
999	1813	Gastrin-Releasing Peptide Receptor	P30550	830	SDLHPFHEESTNQTFISC	Homo sapiens
1000	1813	Gastrin-Releasing Peptide Receptor	P30550	831	YNLPVEGNIHVKKQIES	Homo sapiens
1001	1813	Gastrin-Releasing Peptide Receptor	P30550	832	CQPGLIIRSHSTGRSTT	Homo sapiens
1002	1814	Cholecystokinin B Receptor	Q16144	1281	CEPRIRGAGTRELELAIR	Homo sapiens
1003	1814	Cholecystokinin B Receptor	Q16144	1282	RVRNQGGPLGAVHQNGRC	Homo sapiens
1004	1814	Cholecystokinin B Receptor	Q16144	1283	LRFDGDSDSQSRVR	Homo sapiens
1005	1814	Cholecystokinin B Receptor	Q16144	1284	CRPETGAVGKSDSGCY	Homo sapiens
1006	1834	Glucagon Receptor	P47871	837	DGLLRTRYSQKIGDDL	Homo sapiens
1007	1834	Glucagon Receptor	P47871	838	CGPDGQWVRGPRGQPWRDAS	Homo sapiens
1008	1834	Glucagon Receptor	P47871	839	CQMDGEEIEVQKEVAKMYSS	Homo sapiens
1009	1834	Glucagon Receptor	P47871	840	TSNHRASSSPGHGPPSKE	Homo sapiens
1010	1925	Gonadotropin-Releasing Hormone Receptor	AAA35917.1	206	KLQKWTQKKEGKKLSRMK	Homo sapiens
1011	1925	Gonadotropin-Releasing Hormone Receptor	AAA35917.1	207	DRSLAITRPLALKSNSKVGQ	Homo sapiens
1012	1925	Gonadotropin-Releasing Hormone Receptor	AAA35917.1	208	RMIHLADSSGQTKVFSQC	Homo sapiens
1013	1925	Gonadotropin-Releasing Hormone Receptor	AAA35917.1	209	DPHELQLNQSKNNIPRARLK	Homo sapiens
1014	1945	Opsin, green-sensitive	NP_000504.1	1746	QRLAGRHPQDSYEDSTQSS	Homo sapiens
1015	1945	Opsin, green-sensitive	NP_000504.1	1747	CKPFGNVRFDKLAIVG	Homo sapiens
1016	1945	Opsin, green-sensitive	NP_000504.1	1748	KTSCGPDVFGSSYPGVQS	Homo sapiens

1017	1945	Opsin, green-sensitive	NP_000504.1	1750	CILQLFGKKVDDGSELSS	Homo sapiens
1018	1945	Opsin, green-sensitive	NP_000504.1	1767	STRGPFEGPNYHIAPR	Homo sapiens
1019	1945	Opsin, green-sensitive	NP_000504.1	1768	TNGLVLAATMKFKKLR	Homo sapiens
1020	1945	Opsin, green-sensitive	NP_000504.1	1769	ELSSASKTEVSSVSSVSP	Homo sapiens
1021	1951	Growth Hormone	Q92847	581	ADLDWDASPGNDSLGD	Homo sapiens
1022	1951	Secretagogue Receptor	Q92847	582	GVEHENGTDPWDTNEC	Homo sapiens
1023	1951	Secretagogue Receptor	Q92847	583	KLWRRIRRGDAVVGASL	Homo sapiens
1024	1951	Secretagogue Receptor	Q92847	584	SQRKLSLTKDESSRAW	Homo sapiens
1025	1954	Secretagogue Receptor	Q02643	833	REDESACLQAAEEMPNTILG	Homo sapiens
1026	1954	Growth Hormone-Releasing Hormone Receptor	Q02643	834	CPDFFSHFSSESGAVKRD	Homo sapiens
1027	1954	Growth Hormone-Releasing Hormone Receptor	Q02643	835	VRKLEPAQGSILHTQSQ	Homo sapiens
1028	1954	Growth Hormone-Releasing Hormone Receptor	Q02643	836	RTEISRKWHGHDPELL	Homo sapiens
1029	2120	Histamine H1 Receptor	P35367	1167	GWNHFMQQTSVRRDKC	Homo sapiens
1030	2120	Histamine H1 Receptor	P35367	1168	CQHRELINRSLPSFSEIKLR	Homo sapiens
1031	2120	Histamine H1 Receptor	P35367	1169	AGGGSVLKSPSQTPKE	Homo sapiens
1032	2120	Histamine H1 Receptor	P35367	1170	KSPVVFSEQEDDREVDKLYC	Homo sapiens
1033	2120	Histamine H1 Receptor	P35367	1171	TAPGKGKLRSGSNTGLD	Homo sapiens
1034	2120	Histamine H1 Receptor	P35367	1172	KRLRSHSRQYVSGLHMNRE	Homo sapiens
1035	2121	Histamine H2 Receptor	P25021	1173	NSRNETSKGNHITSKC	Homo sapiens
1036	2121	Histamine H2 Receptor	P25021	1174	CITYYRIFKVARDAQAKR	Homo sapiens
1037	2121	Histamine H2 Receptor	P25021	1175	RDQAKRINHISWCAA	Homo sapiens
1038	2121	Histamine H2 Receptor	P25021	1176	TAFVYRGLRGDDAINE	Homo sapiens
1039	2121	Histamine H2 Receptor	P25021	1177	HKTSLRSNASQLSRTQSRE	Homo sapiens
1040	2783	Opioid Receptor, kappa 1 (OPRK1)	AAA63906.1	227	DSNGSAGSEDAQLEPA	Homo sapiens
1041	2783	Opioid Receptor, kappa 1 (OPRK1)	AAA63906.1	228	KVREDVDVIECSLQFPDDD	Homo sapiens
1042	2783	Opioid Receptor, kappa 1 (OPRK1)	AAA63906.1	229	RNTVQDPAYLRDIDGMNK	Homo sapiens
1043	2783	Opioid Receptor, kappa 1	AAA63906.1	230	CFPLKMRMERQSTSRVRN	Homo sapiens

1044	2964	(OPRK1) Luteinizing Hormone/Chorionadotro pin Receptor	Q14751	1432	CNTGIRKFPDVTKVFSSEN	Homo sapiens
1045	2964	Luteinizing Hormone/Chorionadotro pin Receptor	Q14751	1433	KMHNGAFRGATGPKTLD	Homo sapiens
1046	2964	Luteinizing Hormone/Chorionadotro pin Receptor	Q14751	1434	CESTVRKVSNNKLYSS	Homo sapiens
1047	2964	Luteinizing Hormone/Chorionadotro pin Receptor	Q14751	1435	FAVRNPELMATNKDTK	Homo sapiens
1048	2964	Luteinizing Hormone/Chorionadotro pin Receptor	Q14751	1436	CKRRAELYRRKDFSAYTSN	Homo sapiens
1049	2976	Lysophosphatidic Acid Receptor Edg2	AAC51139.1	210	ERHITVFRMQLHTRMSNRR	Homo sapiens
1050	2976	Lysophosphatidic Acid Receptor Edg2	AAC51139.1	211	RQRTMRMSRPHSSGPRRNRD	Homo sapiens
1051	2976	Lysophosphatidic Acid Receptor Edg2	AAC51139.1	212	KHLATEWNTVSKLVM	Homo sapiens
1052	2976	Lysophosphatidic Acid Receptor Edg2	AAC51139.1	213	ENPTGPTESSDRSASSLN	Homo sapiens
1053	3038	G Protein-Coupled Receptor MRG	AAB21255.1	184	ESQISLSCSLCHSGDQEAQ	Homo sapiens
1054	3038	G Protein-Coupled Receptor MRG	AAB21255.1	185	QQQKATRVAVVQISAPM	Homo sapiens
1055	3038	G Protein-Coupled Receptor MRG	AAB21255.1	186	DKPEVGRNKKAAAGIDPME	Homo sapiens
1056	3038	G Protein-Coupled Receptor MRG	AAB21255.1	187	EQPHSTQHVENLLPREHRVD	Homo sapiens
1057	3057	Melanocortin 3 Receptor (MC3R)	P41968	451	RLHVKKRIAALPPADGVAPQ	Homo sapiens
1058	3057	Melanocortin 3 Receptor (MC3R)	P41968	452	DPLIYAFRSLELRNTFRE	Homo sapiens
1059	3057	Melanocortin 3 Receptor (MC3R)	P41968	562	QAPFFSNQSSSAFCEQVFI	Homo sapiens
1060	3057	Melanocortin 3 Receptor	P41968	563	IVHSDYLTEDQFIQHMDNI	Homo sapiens

1061	3058	(MC3R)	Melanocortin 4 Receptor	AAB33341.1	1032	HSNASESLGKGYSDGGC	Homo sapiens
1062	3058	(MC4R)	Melanocortin 4 Receptor	AAB33341.1	1033	KRIAVLPGTGAIKQGA	Homo sapiens
1063	3058	(MC4R)	Melanocortin 4 Receptor	AAB33341.1	1035	NSTDIDAQSFVNIDN	Homo sapiens
1064	3058	(MC4R)	Melanocortin 4 Receptor	AAB33341.1	1469	NSTHRGMHTSLHLWNRSSYR	Homo sapiens
1065	3059	(MC5R)	Melanocortin 5 Receptor	P33032	1022	ATEGNLSGPNVKNKSSPC	Homo sapiens
1066	3059	(MC5R)	Melanocortin 5 Receptor	P33032	1024	NKHLVIADAFVRHIDN	Homo sapiens
1067	3059	(MC5R)	Melanocortin 5 Receptor	P33032	1025	MNSSFHLHFLDLNLNAT	Homo sapiens
1068	3059	(MC5R)	Melanocortin 5 Receptor	P33032	1026	RYHHIMTARRSGAIIAG	Homo sapiens
1069	3061	(MC1R)	Melanocortin 1 Receptor	AAD41352.1	1036	QGSQRRLGSLNSTPT	Homo sapiens
1070	3061	(MC1R)	Melanocortin 1 Receptor	AAD41352.1	1038	EAGALVARAAVLQQLD	Homo sapiens
1071	3061	(MC1R)	Melanocortin 1 Receptor	AAD41352.1	1039	ALRYHSIVTLPRARQA	Homo sapiens
1072	3061	(MC1R)	Melanocortin 1 Receptor	AAD41352.1	1040	CQHAQGIARLHKRQRP	Homo sapiens
1073	3079		Melatonin Receptor type 1a	AAB17720.1	214	HSLKYDKLYSSKNSLC	Homo sapiens
1074	3079		Melatonin Receptor type 1a	AAB17720.1	215	CTARVFFVDSSNDVADR	Homo sapiens
1075	3079		Melatonin Receptor type 1a	AAB17720.1	216	QVRQRVKPDRKPKLP	Homo sapiens
1076	3079		Melatonin Receptor type 1a	AAB17720.1	217	DSSNDVADRVKWKPSPLMTN	Homo sapiens
1077	3080		Melatonin Receptor type 1b	P49286	930	AVRPGWSGAGSARPSR	Homo sapiens
1078	3080		Melatonin Receptor type 1b	P49286	931	LVAIFYDGGWALGEEHC	Homo sapiens
1079	3080		Melatonin Receptor type 1b	P49286	932	LVLGARIRKAKPESRLC	Homo sapiens
1080	3080		Melatonin Receptor type 1b	P49286	933	CIGDASKGSHAEGLQSPA	Homo sapiens
1081	3080		Melatonin Receptor type 1b	P49286	934	QEMAPQIPEGLFVTSY	Homo sapiens
1082	3081		Melatonin-Related Receptor	Q13585	751	LAARDPAGQNPNDNQLAE	Homo sapiens
1083	3081		Melatonin-Related Receptor	Q13585	752	ARARAHARDQAREQDRAHAC	Homo sapiens
1084	3081		Melatonin-Related Receptor	Q13585	753	DRASGHPKPHSRSSAY	Homo sapiens
1085	3081		Melatonin-Related Receptor	Q13585	754	HPKPAAADNPELSASHC	Homo sapiens

1086	3081	Melatonin-Related Receptor	Q13585	755	DDSDLPESASSPAAAGPT	Homo sapiens
1087	3093	Metabotropic Glutamate Receptor 1	Q13255	879	DDYKIQMINKSGVVRVC	Homo sapiens
1088	3093	Metabotropic Glutamate Receptor 1	Q13255	880	CRSNTEFLNIFRRKKAG	Homo sapiens
1089	3093	Metabotropic Glutamate Receptor 1	Q13255	881	DTSTKTLYNVEEEDA	Homo sapiens
1090	3093	Metabotropic Glutamate Receptor 1	Q13255	882	ERFKLLQEVVVEHERE	Homo sapiens
1091	3094	Metabotropic Glutamate Receptor 2	Q14416	891	DFVRASLSRGADGSRHIC	Homo sapiens
1092	3094	Metabotropic Glutamate Receptor 2	Q14416	892	CVATSEKVGGRAMSRAAFEG	Homo sapiens
1093	3094	Metabotropic Glutamate Receptor 2	Q14416	893	CAAHSLRAVPFEQESK	Homo sapiens
1094	3094	Metabotropic Glutamate Receptor 2	Q14416	894	CDAMRPVNGRRLYKDF	Homo sapiens
1095	3094	Metabotropic Glutamate Receptor 2	Q14416	895	DAPFRPADTHNEVRFD	Homo sapiens
1096	3094	Metabotropic Glutamate Receptor 2	Q14416	896	GKETAPERREVVTLRC	Homo sapiens
1097	3095	Metabotropic Glutamate Receptor 3	CAA54796.1	897	GGLFINEKGTGTEEC	Homo sapiens
1098	3095	Metabotropic Glutamate Receptor 3	CAA54796.1	898	EFVRASLTKVDEAEYMC	Homo sapiens
1099	3095	Metabotropic Glutamate Receptor 3	CAA54796.1	899	RSNIRKSYDSVIRELL	Homo sapiens
1100	3095	Metabotropic Glutamate Receptor 3	CAA54796.1	900	CDKHLAIDSSNVEQES	Homo sapiens
1101	3095	Metabotropic Glutamate Receptor 3	CAA54796.1	902	GTRRYTLAEKRETVILKC	Homo sapiens
1102	3096	Metabotropic Glutamate Receptor 4	Q14833	909	PSSLGKPKGHPHMINIRID	Homo sapiens
1103	3096	Metabotropic Glutamate Receptor 4	Q14833	910	CGSGGPPITKPERVWG	Homo sapiens
1104	3096	Metabotropic Glutamate Receptor 4	Q14833	911	CKLSRHALKKGSHVKK	Homo sapiens
1105	3096	Metabotropic Glutamate Receptor 4	Q14833	913	CPRMDPVDGTQLLKYI	Homo sapiens

1106	3096	Metabotropic Glutamate Receptor 4	Q14833	914	RIERMIHWPGSGQQQLPRSC	Homo sapiens
1107	3097	Metabotropic Glutamate Receptor 5	P41594	883	KDYFDYINVGSWDNGEL	Homo sapiens
1108	3097	Metabotropic Glutamate Receptor 5	P41594	884	KMDDDEVWSKSNIIIRSVC	Homo sapiens
1109	3097	Metabotropic Glutamate Receptor 5	P41594	885	GETLRYKDRRLAQHKSEIC	Homo sapiens
1110	3097	Metabotropic Glutamate Receptor 5	P41594	886	NPNQTAVIKPEPKSTE	Homo sapiens
1111	3097	Metabotropic Glutamate Receptor 5	P41594	887	KALYDVAEAEHFPAPA	Homo sapiens
1112	3097	Metabotropic Glutamate Receptor 5	P41594	888	RSPSPISLISHRAGSASRTD	Homo sapiens
1113	3097	Metabotropic Glutamate Receptor 5	P41594	889	RESPAAGPEAAAAKPD	Homo sapiens
1114	3098	Metabotropic Glutamate Receptor 6	O15303	903	QALIRGRGDGDEVGVRC	Homo sapiens
1115	3098	Metabotropic Glutamate Receptor 6	O15303	904	KLSSGTQSDDDSTRKC	Homo sapiens
1116	3098	Metabotropic Glutamate Receptor 6	O15303	905	DVEALQWSGDPHEVPSSLC	Homo sapiens
1117	3098	Metabotropic Glutamate Receptor 6	O15303	906	RFQVDEFTCEACPGDM	Homo sapiens
1118	3098	Metabotropic Glutamate Receptor 6	O15303	907	GARPPHSVIDYEEQRT	Homo sapiens
1119	3099	Metabotropic Glutamate Receptor 7	Q14831	917	CIAQSVRIQERKDRITDFD	Homo sapiens
1120	3099	Metabotropic Glutamate Receptor 7	Q14831	918	NDEDIKQILAAAKRAD	Homo sapiens
1121	3099	Metabotropic Glutamate Receptor 7	Q14831	921	NIEDMQWGKGVREIPASVC	Homo sapiens
1122	3099	Metabotropic Glutamate Receptor 7	Q14831	2693	IKQLDTPNSRAVVI	Homo sapiens
1123	3099	Metabotropic Glutamate Receptor 7	Q14831	2694	DPPNIIIDYDEHKTM	Homo sapiens
1124	3100	Metabotropic Glutamate Receptor 8	O00222	922	CANGDPPIFTKPKIS	Homo sapiens
1125	3100	Metabotropic Glutamate	O00222	923	CPRMSTIDGKELLYIRA	Homo sapiens

1126	3100	Receptor 8	O00222	924	KVEDMQWAHREHHPASVC	Homo sapiens
1127	3100	Metabotropic Glutamate Receptor 8	O00222	925	CESLETNTSSTKITYSYS	Homo sapiens
1128	3100	Metabotropic Glutamate Receptor 8	O00222	1894	KFYWILTMIMQRTHSQEVASH	Homo sapiens
1129	3212	Opioid mu-type Receptor	AAA20580.1	231	DGNLSDPCGPNRTNLGGRDS	Homo sapiens
1130	3212	Opioid mu-type Receptor	AAA20580.1	232	DRTNHQLENLEAETAPLP	Homo sapiens
1131	3212	Opioid mu-type Receptor	AAA20580.1	233	IKALVTIPETTFQTVS	Homo sapiens
1132	3212	Opioid mu-type Receptor	AAA20580.1	234	RIRQNTRDHPSTANTVDR	Homo sapiens
1133	3223	Muscarinic acetylcholine Receptor M1	AAA35686.1	1325	SERSQPGAEGSPETPPGRC	Homo sapiens
1134	3223	Muscarinic acetylcholine Receptor M1	AAA35686.1	1326	CRAPRLAQAYSWKEEE	Homo sapiens
1135	3223	Muscarinic acetylcholine Receptor M1	AAA35686.1	1327	SSEGEPPGSEVVIKMP	Homo sapiens
1136	3223	Muscarinic acetylcholine Receptor M1	AAA35686.1	1328	KQPPRSSPNTVKRPTKKGRD	Homo sapiens
1137	3223	Muscarinic acetylcholine Receptor M1	AAA35686.1	1329	CRWDKRRWRKIPKRPGS	Homo sapiens
1138	3224	Muscarinic acetylcholine Receptor M2	AAA51570.1	1330	EHNKIQNGKAPRDPVTENC	Homo sapiens
1139	3224	Muscarinic acetylcholine Receptor M2	AAA51570.1	1331	DSTSVSAVASNMIRDDE	Homo sapiens
1140	3224	Muscarinic acetylcholine Receptor M2	AAA51570.1	1332	ENTVSTSLGHSKDENSQTC	Homo sapiens
1141	3224	Muscarinic acetylcholine Receptor M2	AAA51570.1	1333	DEKQINIVARKIVKMTK	Homo sapiens
1142	3224	Muscarinic acetylcholine Receptor M2	AAA51570.1	1831	RIKKDKKEPVANQDPVPSL	Homo sapiens
1143	3226	Muscarinic acetylcholine Receptor M4	AAA51571.1	218	SRSRVHKHRPEGPKEKKAKT	Homo sapiens
1144	3226	Muscarinic acetylcholine Receptor M4	AAA51571.1	219	KKPRPGGRPGGLRNGKLEEA	Homo sapiens
1145	3226	Muscarinic acetylcholine Receptor M4	AAA51571.1	220	DKDTSNESSSGSATQNTKER	Homo sapiens
1146	3226	Muscarinic acetylcholine Receptor M4	AAA51571.1	221	RPAANVARKFASIARNQVRK	Homo sapiens

1147	3227	Muscarinic Acetylcholine Receptor M5	P08912	1334	KAEKRKPAHRAFRSC	Homo sapiens
1148	3227	Muscarinic Acetylcholine Receptor M5	P08912	1335	CSSYPSEDEDKPAID	Homo sapiens
1149	3227	Muscarinic Acetylcholine Receptor M5	P08912	1336	KESPGEEFSAEETEETV	Homo sapiens
1150	3227	Muscarinic Acetylcholine Receptor M5	P08912	1337	KFRLVVKADGNQETNNGC	Homo sapiens
1151	3227	Muscarinic Acetylcholine Receptor M5	P08912	1338	KEPSTKGLNPNSHQM	Homo sapiens
1152	3378	Tachykinin Receptor 3	NP_001050.1	1757	PAAETWIDGGGGVGAD	Homo sapiens
1153	3378	Tachykinin Receptor 3	NP_001050.1	1759	PSQPWANLTNQFVQPSWR	Homo sapiens
1154	3378	Tachykinin Receptor 3	NP_001050.1	1760	SRKKRATPRDPSFNGC	Homo sapiens
1155	3378	Tachykinin Receptor 3	NP_001050.1	2265	ADAVNLTAALAAAGAA	Homo sapiens
1156	3378	Tachykinin Receptor 3	NP_001050.1	2290	SPSALGLPVASAPSPQ	Homo sapiens
1157	3380	Neuromedin B Receptor	P28336	824	ERDFLPASDGTTELVR	Homo sapiens
1158	3380	Neuromedin B Receptor	P28336	825	KTUKSAHNLPGEYNE	Homo sapiens
1159	3380	Neuromedin B Receptor	P28336	826	SEVARISLDNSSFTAC	Homo sapiens
1160	3380	Neuromedin B Receptor	P28336	828	CGRKSYQERGTSYLLSSA	Homo sapiens
1161	3404	Neuropeptide Y Receptor Type 2	P49146	1057	RGELVPDPEPIDST	Homo sapiens
1162	3404	Neuropeptide Y Receptor Type 2	P49146	1058	CIVHLESKISKRISF	Homo sapiens
1163	3404	Neuropeptide Y Receptor Type 2	P49146	1059	REYSUEIIPDFEIVAC	Homo sapiens
1164	3404	Neuropeptide Y Receptor Type 2	P49146	1060	NDHYHQRRQKTKMLVC	Homo sapiens
1165	3404	Neuropeptide Y Receptor Type 2	P49146	1061	CEQRDLAIHSESVTFKAKK	Homo sapiens
1166	3404	Neuropeptide Y Receptor Type 2	P49146	2297	MGPIGAEADENQTVEMKVE	Homo sapiens
1167	3404	Neuropeptide Y Receptor Type 2	P49146	2298	SESVTFKAKKNLEVRKNSG	Homo sapiens
1168	3405	Neuropeptide Y Receptor Type 4	P50391	1068	CVTVRQKEKANVTNLL	Homo sapiens
1169	3405	Neuropeptide Y Receptor Type 4	P50391	1069	KNHSKALEFLADKVC	Homo sapiens
1170	3405	Neuropeptide Y Receptor Type 4	P50391	1070	CYARIYRRLQRQGRVFHKG	Homo sapiens

1171	3405	Type 4 Neuropeptide Y Receptor	P50391	1071	CQQSAPLESEHLPLST	Homo sapiens
1172	3405	Type 4 Neuropeptide Y Receptor	P50391	2275	SEHCQDSVDVMVFIVTS	Homo sapiens
1173	3406	Type 4 Neuropeptide Y Receptor	Q15761	1072	MIKRNQKTTVNFIGN	Homo sapiens
1174	3406	Type 5 Neuropeptide Y Receptor	Q15761	1073	CGLSNKENRLEENEMI	Homo sapiens
1175	3406	Type 5 Neuropeptide Y Receptor	Q15761	1074	NLTLPSSKSGPQVKL	Homo sapiens
1176	3406	Type 5 Neuropeptide Y Receptor	Q15761	1075	SFIKKHRRRYSKKTAC	Homo sapiens
1177	3406	Type 5 Neuropeptide Y Receptor	Q15761	1076	PERPSQENHSRIIPEN	Homo sapiens
1178	3406	Type 5 Neuropeptide Y Receptor	Q15761	1077	CFEIKPEENSVDVHELRV	Homo sapiens
1179	3408	Type 5 Neurotensin Receptor Type 1	P30989	935	RVLAAPSSSELDVNTDIYS	Homo sapiens
1180	3408	Neurotensin Receptor Type 1	P30989	936	CHPFKAKTLMRSRTKK	Homo sapiens
1181	3408	Neurotensin Receptor Type 1	P30989	937	GEQNRSDGQHAGGLVC	Homo sapiens
1182	3408	Neurotensin Receptor Type 1	P30989	938	RQAAEQGQVCTVGGHES	Homo sapiens
1183	3408	Neurotensin Receptor Type 1	P30989	939	CPVWRRRRRKRPAFSRKADS	Homo sapiens
1184	3452	Oplate Receptor-Like 1 (OPRL1)	P41146	940	CHPIRALDVRTSSKAQA	Homo sapiens
1185	3452	Oplate Receptor-Like 1 (OPRL1)	P41146	941	PVAIMGSAQVEDEEIEC	Homo sapiens
1186	3452	Oplate Receptor-Like 1 (OPRL1)	P41146	942	GVQPSSETAVAILRFC	Homo sapiens
1187	3452	Oplate Receptor-Like 1 (OPRL1)	P41146	943	CASALRQDVQVSDRVRSIAK	Homo sapiens
1188	3513	Ocular Albinism 1 (Nettleship-Falls) (OA1)	NP_000264.1	2123	TPEPRRTQPMASPRLGTFC	Homo sapiens
1189	3513	Ocular Albinism 1 (Nettleship-Falls) (OA1)	NP_000264.1	2124	TAVASLLKGRQGIYE	Homo sapiens

1190	3513	Ocular Albinism 1 (Nettleship-Falls) (OA1)	NP_000264.1	2125	EMQTDINGGSLKPVRTAAK	Homo sapiens
1191	3513	Ocular Albinism 1 (Nettleship-Falls) (OA1)	NP_000264.1	2126	CSLGFQSPRKEIQWES	Homo sapiens
1192	3513	Ocular Albinism 1 (Nettleship-Falls) (OA1)	NP_000264.1	2127	SEGSDASTIEHTASESC	Homo sapiens
1193	3513	Ocular Albinism 1 (Nettleship-Falls) (OA1)	NP_000264.1	2128	NPASGKVSQVGGQTS	Homo sapiens
1194	3544	UDP-glucose Receptor (KIAA0001)	NP_055694.1	1486	CKKLHIPLKAQNDLDIRIK	Homo sapiens
1195	3544	UDP-glucose Receptor (KIAA0001)	NP_055694.1	1500	KIVKPLWTSFIQSVSYSKLL	Homo sapiens
1196	3544	UDP-glucose Receptor (KIAA0001)	NP_055694.1	1502	TAITKKIFKSHLKSSRNSTS	Homo sapiens
1197	3544	UDP-glucose Receptor (KIAA0001)	NP_055694.1	1503	VKKKSSRNIFSIVFFVC	Homo sapiens
1198	3582	Oxytocin Receptor	CAA46097.1	244	AEGNRTAGPPRRNEALARVE	Homo sapiens
1199	3582	Oxytocin Receptor	CAA46097.1	245	RLAVLATWLGCLVASAP	Homo sapiens
1200	3582	Oxytocin Receptor	CAA46097.1	246	PEGAAAGDGGGRVALAR	Homo sapiens
1201	3582	Oxytocin Receptor	CAA46097.1	247	YKGRRLGETSASKKSNSS	Homo sapiens
1202	3589	Purinergic Receptor P2Y, G- protein coupled, 2 (P2RY2)	AAC04923.1	854	MQRIGDVLGSSEDFRR	Homo sapiens
1203	3589	Purinergic Receptor P2Y, G- protein coupled, 2 (P2RY2)	AAC04923.1	855	ARGGRVTCCHDTSAPEL	Homo sapiens
1204	3589	Purinergic Receptor P2Y, G- protein coupled, 2 (P2RY2)	AAC04923.1	856	KPAYGTSGGLPRAKRK	Homo sapiens
1205	3589	Purinergic Receptor P2Y, G- protein coupled, 2 (P2RY2)	AAC04923.1	857	TGPSPATPARRRLGLRRSD	Homo sapiens
1206	3595	Purinergic Receptor P2Y1	CAA07339.1	386	RYSGVVVPLKSLGRLKKN	Homo sapiens
1207	3595	Purinergic Receptor P2Y1	CAA07339.1	387	SGTGVKKNKTITCYD	Homo sapiens
1208	3595	Purinergic Receptor P2Y1	CAA07339.1	388	RALYKDLDNSPLRRKS	Homo sapiens
1209	3595	Purinergic Receptor P2Y1	CAA07339.1	389	DTFRRRLSRATRKASRRSE	Homo sapiens
1210	3596	Purinergic Receptor P2Y5	P43657	850	FVQSTHSQGNNAEAC	Homo sapiens
1211	3596	Purinergic Receptor P2Y5	P43657	851	MVLKTLTKPVLRSKI	Homo sapiens
1212	3596	Purinergic Receptor P2Y5	P43657	852	TIQNSIKMKNWSVRRSD	Homo sapiens
1213	3596	Purinergic Receptor P2Y5	P43657	853	SEVHGAENFIQHNLQTLK	Homo sapiens
1214	3597	Purinergic Receptor P2Y6	Q15077	874	CTSRRLTRTAVVTLN	Homo sapiens
1215	3597	Purinergic Receptor P2Y6	Q15077	875	AQERRGKAARMAMVVV	Homo sapiens

1216	3597	Purinergic Receptor P2Y6	Q15077	876	TKTAYLAVRSTPGVPC	Homo sapiens
1217	3597	Purinergic Receptor P2Y6	Q15077	877	KKFRRRPHELLQKLIK	Homo sapiens
1218	3597	Purinergic Receptor P2Y6	Q15077	2726	CHPLAPWHKRGGRRAAW	Homo sapiens
1219	3599	G Protein-Coupled Receptor 23 (GPR23)	Q99677	870	CFRMKMRSETAIFITN	Homo sapiens
1220	3599	G Protein-Coupled Receptor 23 (GPR23)	Q99677	871	RTLKRPATLSQIGTNKK	Homo sapiens
1221	3599	G Protein-Coupled Receptor 23 (GPR23)	Q99677	872	ESFQKSFYINAHIRMES	Homo sapiens
1222	3599	G Protein-Coupled Receptor 23 (GPR23)	Q99677	873	KTETPLTTKPSLPAIQEE	Homo sapiens
1223	3599	G Protein-Coupled Receptor 23 (GPR23)	Q99677	1895	SSLRPRLGNATANNTCIVD	Homo sapiens
1224	3638	Parathyroid Hormone Receptor 2 (PTHr2)	AAC50157.1	248	KAKVQCELNITAGLQEGE	Homo sapiens
1225	3638	Parathyroid Hormone Receptor 2 (PTHr2)	AAC50157.1	249	ESLIMQDDPPQNSIEATSVDK	Homo sapiens
1226	3638	Parathyroid Hormone Receptor 2 (PTHr2)	AAC50157.1	250	NSEQDCLPHSFHEETKE	Homo sapiens
1227	3638	Parathyroid Hormone Receptor 2 (PTHr2)	AAC50157.1	251	EETKEDSGRQGGDDILMEKPS	Homo sapiens
1228	3640	Parathyroid Hormone Receptor 1 (PTHr1)	Q03431	761	CEKRLKEVLQRPASIMESDK	Homo sapiens
1229	3640	Parathyroid Hormone Receptor 1 (PTHr1)	Q03431	762	ESEEDKEAPTGSRYRGRPC	Homo sapiens
1230	3640	Parathyroid Hormone Receptor 1 (PTHr1)	Q03431	763	LYSGATLDEAERLTFEEELR	Homo sapiens
1231	3640	Parathyroid Hormone Receptor 1 (PTHr1)	Q03431	765	KDDGFLNGSCSGLDEEASG	Homo sapiens
1232	3732	PACAP Receptor Type 1	P41586	944	CLEKIQRANELMGFNDSS	Homo sapiens
1233	3732	PACAP Receptor Type 1	P41586	945	CPELFRIFNPQVWVETET	Homo sapiens
1234	3732	PACAP Receptor Type 1	P41586	946	DSNSLDLSDMGVVSRLNC	Homo sapiens
1235	3732	PACAP Receptor Type 1	P41586	948	IKRKWRSWKVNIYFAVD	Homo sapiens
1236	3732	PACAP Receptor Type 1	P41586	2292	ESDFGDSNSLDLSDMGVVSRL	Homo sapiens
1237	3844	Apelin Receptor	AAA18954.1	62	RTTGDLNNTKVVQC	Homo sapiens
1238	3844	Apelin Receptor	AAA18954.1	63	RSSREKRRSADIFIAS	Homo sapiens
1239	3844	Apelin Receptor	AAA18954.1	64	QTIAGHFHFKERIEGLRKRRR	Homo sapiens
1240	3844	Apelin Receptor	AAA18954.1	65	GPNMGKGGEQMEKSPYSQ	Homo sapiens

1241	3845	Chemokine-Like Receptor 1 (CMKLR1)	LR39	447	RMEDEDYNTISYGYDEYPD	Homo sapiens
1242	3845	Chemokine-Like Receptor 1 (CMKLR1)	Q99788	448	DSIVVLEDLSPLEARVTR	Homo sapiens
1243	3845	Chemokine-Like Receptor 1 (CMKLR1)	Q99788	449	LTIVCKLHRNRLAKTKPKFK	Homo sapiens
1244	3845	Chemokine-Like Receptor 1 (CMKLR1)	Q99788	450	RSFTKMSSMNERTSMNERE	Homo sapiens
1245	3846	Spingolipid Receptor Edg1	AAA52336.1	1010	TRSRRLTRKNISKASRSSE	Homo sapiens
1246	3846	Spingolipid Receptor Edg1	AAA52336.1	1011	CPSGDSAGKFKRPIIAG	Homo sapiens
1247	3846	Spingolipid Receptor Edg1	AAA52336.1	1012	CPSGDSAGKFKRPIIAGME	Homo sapiens
1248	3846	Spingolipid Receptor Edg1	AAA52336.1	1013	RSKSDNSSHPQKDEGD	Homo sapiens
1249	3847	Spingolipid Receptor Edg3	Q99500	1028	ERHLMIMKMRPYDANK	Homo sapiens
1250	3847	Spingolipid Receptor Edg3	Q99500	1029	LVKSSSRKVVAHNHNSSE	Homo sapiens
1251	3847	Spingolipid Receptor Edg3	Q99500	1030	SPKVKEDLPHTDPSSC	Homo sapiens
1252	3847	Spingolipid Receptor Edg3	Q99500	1031	CLVRGRGARASPIQPALD	Homo sapiens
1253	3847	Spingolipid Receptor Edg3	Q99500	1752	REHYQVWGKLAGRLKEASE	Homo sapiens
1254	3848	C-C Chemokine Receptor 9	P51686	958	RAHTWREKRLLYSKMVC	Homo sapiens
1255	3848	C-C Chemokine Receptor 9	P51686	959	KEESGIAICTMVVPSDEST	Homo sapiens
1256	3848	C-C Chemokine Receptor 9	P51686	960	QAKSSKHKALKVTIT	Homo sapiens
1257	3848	C-C Chemokine Receptor 9	P51686	961	GERFRDLVKTLKNILGC	Homo sapiens
1258	3849	G Protein-Coupled Receptor GPR1	AAA64592.1	74	ENYSYDLDYYSLESDLEEK	Homo sapiens
1259	3849	G Protein-Coupled Receptor GPR1	AAA64592.1	75	RDTVEFNHHTLCYNNFQKHD	Homo sapiens
1260	3849	G Protein-Coupled Receptor GPR1	AAA64592.1	76	SKKFQARFRSSVAEILK	Homo sapiens
1261	3849	G Protein-Coupled Receptor GPR1	AAA64592.1	77	GTVSEQLRNSETKNLC	Homo sapiens
1262	3850	G Protein-Coupled Receptor 10 (GPR10)	O75194	1087	HPLRRLRLSAYAV	Homo sapiens
1263	3850	G Protein-Coupled Receptor 10 (GPR10)	O75194	1088	CEEFWGSQERQRLYA	Homo sapiens
1264	3850	G Protein-Coupled Receptor 10 (GPR10)	O75194	1089	SVVRVSVKLRNRVWPGC	Homo sapiens
1265	3850	G Protein-Coupled Receptor 10 (GPR10)	O75194	1090	CVTGSQADWDRARRRR	Homo sapiens
1266	3850	G Protein-Coupled Receptor 10 (GPR10)	O75194	1091	DSFREELRKLLVAWPRKIA	Homo sapiens

1267	3851	Receptor 10 (GPR10) G Protein-Coupled Receptor GPR12	AAA91630.1	78	GCISSLAQRRARSPSD	Homo sapiens
1268	3851	G Protein-Coupled Receptor GPR12	AAA91630.1	79	ENISAAVSSRVP AVEPEPE	Homo sapiens
1269	3851	G Protein-Coupled Receptor GPR12	AAA91630.1	307	STCSVVRPLTKNNA	Homo sapiens
1270	3851	G Protein-Coupled Receptor GPR12	AAA91630.1	308	QSEATKLVITIGLIVAS	Homo sapiens
1271	3852	CX3C Chemokine Fractalkine Receptor 1	AAA91783.1	84	KQKENECLGDYPEVLQE	Homo sapiens
1272	3852	CX3C Chemokine Fractalkine Receptor 1	AAA91783.1	85	SMNNRTVQHGVITSL	Homo sapiens
1273	3852	CX3C Chemokine Fractalkine Receptor 1	AAA91783.1	86	ETLKLYDFFPSCDMIRKDLR	Homo sapiens
1274	3852	CX3C Chemokine Fractalkine Receptor 1	AAA91783.1	87	GRSVHVDFFSSSESQRSRHGS	Homo sapiens
1275	3853	G Protein-Coupled Receptor GPR15	NP_005281.1	1511	CLKNVDFGSSTETSDSHLTK	Homo sapiens
1276	3853	G Protein-Coupled Receptor GPR15	NP_005281.1	1512	KALSTFIHAEDFAIRRKRS	Homo sapiens
1277	3853	G Protein-Coupled Receptor GPR15	NP_005281.1	1612	ATSPNSDIRETHSHVP	Homo sapiens
1278	3853	G Protein-Coupled Receptor GPR15	NP_005281.1	1613	LMGALHFPGSRRLUD	Homo sapiens
1279	3853	G Protein-Coupled Receptor GPR15	NP_005281.1	1615	GLPTLLSRELTUDDKPYC	Homo sapiens
1280	3854	G Protein-Coupled Receptor GPR18	AAB65819.1	93	DRYMAIVQPKYAKELKNTC	Homo sapiens
1281	3854	G Protein-Coupled Receptor GPR18	AAB65819.1	94	KDPDKDSTPATCLKISD	Homo sapiens
1282	3854	G Protein-Coupled Receptor GPR18	AAB65819.1	95	GRTSKLKPVKVEKSIR	Homo sapiens
1283	3854	G Protein-Coupled Receptor GPR18	AAB65819.1	96	RNYLRLRKRKSFSGSLR	Homo sapiens
1284	3855	G Protein-Coupled Receptor GPR19	AAB00316.1	97	KVSREKAKKMIAASWIFD	Homo sapiens
1285	3855	G Protein-Coupled Receptor GPR19	AAB00316.1	98	DGRTVRRITMNIIVPRTKVK	Homo sapiens

1286	3855	G Protein-Coupled Receptor GPR19	AA800316.1	99	RRGMKETFCMSSMKC	Homo sapiens
1287	3855	G Protein-Coupled Receptor GPR19	AA800316.1	100	KTITKDSIYDSFDREAKEKK	Homo sapiens
1288	3856	G Protein-Coupled Receptor GPR2/CCR10	P46092	1152	ALLFSQDGGQREGQRRRC	Homo sapiens
1289	3856	G Protein-Coupled Receptor GPR2/CCR10	P46092	1153	SGDEEDAYSAEPLPELC	Homo sapiens
1290	3856	G Protein-Coupled Receptor GPR2/CCR10	P46092	1154	ALLDTADILLAARERS	Homo sapiens
1291	3856	G Protein-Coupled Receptor GPR2/CCR10	P46092	1155	RRLRRGGSSPSGPQRRRC	Homo sapiens
1292	3857	G Protein-Coupled Receptor GPR20	AAC51302.1	101	KSGGRHILSAGPHALTQ	Homo sapiens
1293	3857	G Protein-Coupled Receptor GPR20	AAC51302.1	102	RTNASGLEVPLFHLFARLDE	Homo sapiens
1294	3857	G Protein-Coupled Receptor GPR20	AAC51302.1	103	SRPGLLHQGRQRRVRAMQ	Homo sapiens
1295	3857	G Protein-Coupled Receptor GPR20	AAC51302.1	104	GQHGEPSSGDVSMHRSS	Homo sapiens
1296	3858	G Protein-Coupled Receptor GPR21	AAC51303.1	105	SERQARFSSQSGETGEVQAC	Homo sapiens
1297	3858	G Protein-Coupled Receptor GPR21	AAC51303.1	106	DPYTVRSKGPLNGC	Homo sapiens
1298	3858	G Protein-Coupled Receptor GPR21	AAC51303.1	107	NSTLDGNQSSHPFCLL	Homo sapiens
1299	3858	G Protein-Coupled Receptor GPR21	AAC51303.1	108	CASQTTANDPYTVRSK	Homo sapiens
1300	3859	G Protein-Coupled Receptor GPR22	AAC51304.1	109	EINMQSESITVRDDIDD	Homo sapiens
1301	3859	G Protein-Coupled Receptor GPR22	AAC51304.1	111	RRAVKRHRERRERQKRVFRM	Homo sapiens
1302	3859	G Protein-Coupled Receptor GPR22	AAC51304.1	112	TRQKFQKVLKSKMKKR	Homo sapiens
1303	3859	G Protein-Coupled Receptor GPR22	AAC51304.1	113	DPKRNKKITFEDSEIREKR	Homo sapiens
1304	3860	G Protein-Coupled Receptor SLC/MCH1	AAH01736.1	1532	CAPGQGGRRWRLPQPAWVEG	Homo sapiens
1305	3860	G Protein-Coupled	AAH01736.1	1533	EASLLPTGPNASNTSDGPDN	Homo sapiens

1306	3860	Receptor SLC/MCH1	AAH01736.1	1539	KGVGRAVGLGGSGCQATE	Homo sapiens
1307	3860	G Protein-Coupled Receptor SLC/MCH1	AAH01736.1	1565	RMTSSVAPASQSRIRLTKR	Homo sapiens
1308	3860	G Protein-Coupled Receptor SLC/MCH1	AAH01736.1	1567	RAVSNAQTADERTESKG	Homo sapiens
1309	3861	G Protein-Coupled Receptor SLC/MCH1	O00155	376	RGLQLPGGQDSQCGEEP	Homo sapiens
1310	3861	G Protein-Coupled Receptor GPR25	O00155	377	CRISRLRRPPHVGRARRNS	Homo sapiens
1311	3861	G Protein-Coupled Receptor GPR25	O00155	378	RTGRLARRISSASSLSRDD	Homo sapiens
1312	3861	G Protein-Coupled Receptor GPR25	O00155	483	DYSGLDGLEELELCAPAGD	Homo sapiens
1313	3862	G Protein-Coupled Receptor GPR3	AAB60402.1	118	TWCLLGDAHSPPLYT	Homo sapiens
1314	3862	G Protein-Coupled Receptor GPR3	AAB60402.1	119	EGPTGPAAPLPSPKAWD	Homo sapiens
1315	3862	G Protein-Coupled Receptor GPR3	AAB60402.1	120	HFAAVFCIGSAEMSL	Homo sapiens
1316	3862	G Protein-Coupled Receptor GPR3	AAB60402.1	121	GLTCGVVYPLSKNH	Homo sapiens
1317	3863	G Protein-Coupled Receptor GPR31	O00270	1157	REPEKQPKLQRAQALVTLV	Homo sapiens
1318	3863	G Protein-Coupled Receptor GPR31	O00270	1158	CHSFYSRADGFSFIWQEA	Homo sapiens
1319	3863	G Protein-Coupled Receptor GPR31	O00270	1159	QNLGSCRALCAVAHTSDVTG	Homo sapiens
1320	3863	G Protein-Coupled Receptor GPR31	O00270	1160	SPTFRSSYRRVFHTLRGKGQ	Homo sapiens
1321	3864	G Protein-Coupled Receptor GPR4	AAA98457.1	143	DELFRDRYNHTFCFEKFPME	Homo sapiens
1322	3864	G Protein-Coupled Receptor GPR4	AAA98457.1	144	LRVVRGVSSTERQEKAKIKR	Homo sapiens
1323	3864	G Protein-Coupled Receptor GPR4	AAA98457.1	145	RSDVAKALHNLRLFLASDK	Homo sapiens
1324	3864	G Protein-Coupled Receptor GPR4	AAA98457.1	146	NASLTLETPLTSKRNSTAK	Homo sapiens

1325	3866	G Protein-Coupled Receptor GPR6	AAA91631.1	166	FQYLVPSETVSLTVG	Homo sapiens
1326	3866	G Protein-Coupled Receptor GPR6	AAA91631.1	167	CLAERAAACSVWRPLARSH	Homo sapiens
1327	3866	G Protein-Coupled Receptor GPR6	AAA91631.1	168	HLVYRICQVVRHAH	Homo sapiens
1328	3866	G Protein-Coupled Receptor GPR6	AAA91631.1	169	EIQRALWLLCGCFQSK	Homo sapiens
1329	3867	G Protein-Coupled Receptor GPR7	AAC50197.1	171	ATAESRRVAGRTYSAAR	Homo sapiens
1330	3867	G Protein-Coupled Receptor GPR7	AAC50197.1	172	RLDDEQRRQCVLVFPQPE	Homo sapiens
1331	3867	G Protein-Coupled Receptor GPR7	AAC50197.1	173	RLHAMRLDSHAKALERAKKR	Homo sapiens
1332	3867	G Protein-Coupled Receptor GPR7	AAC50197.1	174	DASFRNLRQLITC	Homo sapiens
1333	3868	G Protein-Coupled Receptor GPR8	AAC50198.1	175	NVSQDNGTGHNATFSEP	Homo sapiens
1334	3868	G Protein-Coupled Receptor GPR8	AAC50198.1	176	RSRHMPWRTYRGAKVAS	Homo sapiens
1335	3868	G Protein-Coupled Receptor GPR8	AAC50198.1	177	VLRLSGAKALGKARRK	Homo sapiens
1336	3868	G Protein-Coupled Receptor GPR8	AAC50198.1	178	LDDNFRKNFRSILRC	Homo sapiens
1337	3869	G Protein-Coupled Receptor HM74	BAA01721.1	179	QDHFLEIDKKNCVFRDD	Homo sapiens
1338	3869	G Protein-Coupled Receptor HM74	BAA01721.1	180	ARIWLSLRQRQMDRHAQIKR	Homo sapiens
1339	3869	G Protein-Coupled Receptor HM74	BAA01721.1	181	CLQRKMTGEPDNNRSTSV	Homo sapiens
1340	3869	G Protein-Coupled Receptor HM74	BAA01721.1	182	DPNKTGGAPEALMANSGE	Homo sapiens
1341	3869	G Protein-Coupled Receptor HM74	BAA01721.1	183	SNNHKKKGCHQEPASLEKQ	Homo sapiens
1342	3869	G Protein-Coupled Receptor HM74	BAA01721.1	1453	RQRQMDRHAQIKRAITFIMV	Homo sapiens
1343	3869	G Protein-Coupled Receptor HM74	BAA01721.1	1454	SPSYLGPTSNNHKKKG	Homo sapiens
1344	3870	G Protein-Coupled	Q15743	1192	AVRRSHGTQKSRKDQI	Homo sapiens

1345	3870	Receptor OGR1	Q15743	1193	LMHEEVIEDENQHRVC	Homo sapiens
1346	3870	G Protein-Coupled Receptor OGR1	Q15743	1194	CFVSETHRD LARLRG	Homo sapiens
1347	3870	G Protein-Coupled Receptor OGR1	Q15743	1195	CSRTGRAREAYPLGAPÉASG	Homo sapiens
1348	3921	Prostaglandin Receptor	P43119	1188	CRMYRQQRKHQGSGLPRPRT	Homo sapiens
1349	3921	Prostaglandin Receptor	P43119	1189	CFTQAVAPDSSEMGD	Homo sapiens
1350	3921	Prostaglandin Receptor	P43119	1190	ASGRRDPRAPSAPVKEGSC	Homo sapiens
1351	3921	Prostaglandin Receptor	P43119	1191	SAWGEQVEPLPTQQ	Homo sapiens
1352	3923	Prostaglandin D2 Receptor	Q13258	458	KSPFYRCQNTTSVEKGN SAV	Homo sapiens
1353	3923	Prostaglandin D2 Receptor	Q13258	459	RNLYAMHRR LQRHPRSC	Homo sapiens
1354	3923	Prostaglandin D2 Receptor	Q13258	503	CAEPRADGREAS PQLEEL	Homo sapiens
1355	3923	Prostaglandin D2 Receptor	Q13258	504	KDVKEKNRTSEAE DLRALR	Homo sapiens
1356	3924	Prostaglandin E Receptor EP1	P34995	962	AQAAGRLRRRSATF	Homo sapiens
1357	3924	Prostaglandin E Receptor EP1	P34995	963	CVGVTRPLLHAARVSVARAR	Homo sapiens
1358	3924	Prostaglandin E Receptor EP1	P34995	964	CNTLSGLALHRARWRR	Homo sapiens
1359	3924	Prostaglandin E Receptor EP1	P34995	965	ASGPD SRRRWGAHGPR	Homo sapiens
1360	3924	Prostaglandin E Receptor EP1	P34995	966	SGSARRARAH D VEMVGG	Homo sapiens
1361	3925	Prostaglandin E Receptor EP2	AAD44177.1	967	IALALLARRWRGDVGC	Homo sapiens
1362	3925	Prostaglandin E Receptor EP2	AAD44177.1	968	CETRQWLPPGESPAISSV	Homo sapiens
1363	3925	Prostaglandin E Receptor EP2	AAD44177.1	969	GPSLGSGRGGPGARRRGE	Homo sapiens
1364	3925	Prostaglandin E Receptor EP2	AAD44177.1	971	NETSSRKEKWD LQALR	Homo sapiens
1365	3926	Prostaglandin E2 Receptor EP3	CAB52459.1	972	ERSAEARGNLTRPPGSGEDC	Homo sapiens
1366	3926	Prostaglandin E2 Receptor EP3	CAB52459.1	973	SRSYRRRESKRKKSFLLC	Homo sapiens
1367	3926	Prostaglandin E2 Receptor	CAB52459.1	974	CRAKATASQSSAQWGR	Homo sapiens

1368	3926	EP3	Prostaglandin E2 Receptor	CAB52459.1	975	KFCQVANAVSSCSNDGQ	Homo sapiens
1369	3927	EP3	Prostaglandin E Receptor	P35408	382	RLSDFRRRRSFRRIAGAE	Homo sapiens
1370	3927	EP4	Prostaglandin E Receptor	P35408	383	EREVSKNPDLQAIRIAS	Homo sapiens
1371	3927	EP4	Prostaglandin E Receptor	P35408	384	DSQRTSSAMSGHSRSFSIRE	Homo sapiens
1372	3927	EP4	Prostaglandin E Receptor	P35408	385	RTLRISETSDSSQGGQDSE	Homo sapiens
1373	3928	Receptor	Prostaglandin F2-alpha	P43088	1046	ILMKAYQRFRQKSKAS	Homo sapiens
1374	3928	Receptor	Prostaglandin F2-alpha	P43088	1047	ASDKEWIRFDQSNVLC	Homo sapiens
1375	3928	Receptor	Prostaglandin F2-alpha	P43088	1048	TKPIFHSTKITSKHVK	Homo sapiens
1376	3928	Receptor	Prostaglandin F2-alpha	P43088	1049	CFYNTEDIKDWEDEFY	Homo sapiens
1377	3928	Receptor	Prostaglandin F2-alpha	P43088	1050	RVKFKSQQHRQGRSHHLE	Homo sapiens
1378	4051	Proteinase-Activated Receptor 2	Proteinase-Activated Receptor 2	AAB47871.1	252	QGTNRSSKGRSLUGKVDGTS	Homo sapiens
1379	4051	Proteinase-Activated Receptor 2	Proteinase-Activated Receptor 2	AAB47871.1	253	QRYWVIVNPMGHSRKKAN	Homo sapiens
1380	4051	Proteinase-Activated Receptor 2	Proteinase-Activated Receptor 2	AAB47871.1	255	SHDFRDHAKNALLCRSVR	Homo sapiens
1381	4051	Proteinase-Activated Receptor 2	Proteinase-Activated Receptor 2	AAB47871.1	256	VSLTSKKHSRKSSSYS	Homo sapiens
1382	4052	Proteinase-Activated Receptor 3	Proteinase-Activated Receptor 3	AAC51218.1	257	ENDTNNLAKPTLPIKTR	Homo sapiens
1383	4052	Proteinase-Activated Receptor 3	Proteinase-Activated Receptor 3	AAC51218.1	258	CPEESASHLHVKNATMG	Homo sapiens
1384	4052	Proteinase-Activated Receptor 3	Proteinase-Activated Receptor 3	AAC51218.1	260	QPDITTCDDVHNTCESSSP	Homo sapiens
1385	4052	Proteinase-Activated Receptor 3	Proteinase-Activated Receptor 3	AAC51218.1	261	MSKTRNHSTAYLTK	Homo sapiens
1386	4090	G Protein-Coupled Receptor GPR17	G Protein-Coupled Receptor GPR17	CAB08108.1	88	RDHKSGETPANVFLMH	Homo sapiens

1387	4090	G Protein-Coupled Receptor GPR17	CAB08108.1	90	RSLRQGLRVEKRLTKAVR	Homo sapiens
1388	4090	G Protein-Coupled Receptor GPR17	CAB08108.1	91	RSHGASCATQRLALANR	Homo sapiens
1389	4090	G Protein-Coupled Receptor GPR17	CAB08108.1	92	FEGKTNESSLSAKSE	Homo sapiens
1390	4254	Rhodopsin	P08100	1051	RNCMLTICCGKNPLGD	Homo sapiens
1391	4254	Rhodopsin	P08100	1052	CGIDYYTLKPEVNNEFVI	Homo sapiens
1392	4254	Rhodopsin	P08100	1053	CWVPYASVAFVIFTHQGSN	Homo sapiens
1393	4254	Rhodopsin	P08100	1055	VLGGFTSLYTSLHGY	Homo sapiens
1394	4284	Retinal G Protein-Coupled Receptor RPE	P47804	1042	ATSSLLRRWPYGS DGC	Homo sapiens
1395	4284	Retinal G Protein-Coupled Receptor RPE	P47804	1043	CTLDYSKGD RNF TSL	Homo sapiens
1396	4284	Retinal G Protein-Coupled Receptor RPE	P47804	1044	MEQKLGKSGHLQVNTT	Homo sapiens
1397	4284	Retinal G Protein-Coupled Receptor RPE	P47804	1045	MVCRGIWQCLSPQKRE	Homo sapiens
1398	4321	Secretin Receptor	P47872	950	CLQELSR EQTGLGTEQ	Homo sapiens
1399	4321	Secretin Receptor	P47872	951	CPFLRLMLTSRNGSLFRN	Homo sapiens
1400	4321	Secretin Receptor	P47872	952	CGVNVNDSSNEKRHSY	Homo sapiens
1401	4321	Secretin Receptor	P47872	954	KDAVLFSSDDVTYCD AH	Homo sapiens
1402	4321	Secretin Receptor	P47872	956	MIRKLRTQETIRGNEVSH	Homo sapiens
1403	4480	Somatostatin Receptor Type 1	P30872	994	EEPGRNASQNGTLSEG	Homo sapiens
1404	4480	Somatostatin Receptor Type 1	P30872	996	CLSWMDNAAEEPVDY	Homo sapiens
1405	4480	Somatostatin Receptor Type 1	P30872	997	EDFQPENLESGGVFRNGTC	Homo sapiens
1406	4480	Somatostatin Receptor Type 1	P30872	2616	LSVDVAVNMFTSYC	Homo sapiens
1407	4480	Somatostatin Receptor Type 1	P30872	2618	RAYSVEDFQPENLES	Homo sapiens
1408	4481	Somatostatin Receptor Type 2	P30874	998	RSNQWGRSSCTINWPGE	Homo sapiens
1409	4481	Somatostatin Receptor Type 2	P30874	999	KVKSSGIRVGSSKRKKE	Homo sapiens
1410	4481	Somatostatin Receptor Type	P30874	1000	CLVKVSGTDDGERSDS	Homo sapiens

1411	4481	2	Somatostatin Receptor Type	P30874	1001	KQDKSRINETTETQRT	Homo sapiens
1412	4481	2	Somatostatin Receptor Type	P30874	2276	DMADEPLNGSHTWLSIP	Homo sapiens
1413	4482	2	Somatostatin Receptor Type	P32745	1002	KVRSAGRRVWAPSCQR	Homo sapiens
1414	4482	3	Somatostatin Receptor Type	P32745	2622	REGGKGKEMNGRVSQI	Homo sapiens
1415	4482	3	Somatostatin Receptor Type	P32745	2624	TTSEPENASSAWPPD	Homo sapiens
1416	4482	3	Somatostatin Receptor Type	P32745	2626	QPGTSGQERPPSRVA	Homo sapiens
1417	4483	4	Somatostatin Receptor Type	P31391	1007	IFADTRPARGGQAVAC	Homo sapiens
1418	4483	4	Somatostatin Receptor Type	P31391	1008	CLLEGAGGAEEEEPLDY	Homo sapiens
1419	4483	4	Somatostatin Receptor Type	P31391	2627	KMRAVALRAGWQQRR	Homo sapiens
1420	4483	4	Somatostatin Receptor Type	P31391	2631	CRAVLSDGLNMFTSV	Homo sapiens
1421	4483	4	Somatostatin Receptor Type	P31391	2633	CLVGLVGNALVIFVL	Homo sapiens
1422	4484	5	Somatostatin Receptor Type	NP_001044.1	2637	SLPLLVFADVQEGGTC	Homo sapiens
1423	4484	5	Somatostatin Receptor Type	NP_001044.1	2638	CLRKGGGAKDADATEP	Homo sapiens
1424	4484	5	Somatostatin Receptor Type	NP_001044.1	2639	RIRQQQEATPPAHRAAA	Homo sapiens
1425	4484	5	Somatostatin Receptor Type	NP_001044.1	2643	RVAKLASAAAWVLSLC	Homo sapiens
1426	4552	1	Tachykinin Receptor 1	AAA36641.1	1339	CMIEWPEHPNKIYKV	Homo sapiens
1427	4552	1	Tachykinin Receptor 1	AAA36641.1	1340	CPFISAGDYEGLMKSTRYL	Homo sapiens
1428	4552	1	Tachykinin Receptor 1	AAA36641.1	1341	KVSRLETTISTVVGAAHEE	Homo sapiens
1429	4552	1	Tachykinin Receptor 1	AAA36641.1	1342	EPEDGPKATPSSLDLTSNC	Homo sapiens
1430	4687	1	Thrombin Receptor	P25116	1202	EDEEKNESGLTEYRLV	Homo sapiens
1431	4687	1	Thrombin Receptor	P25116	2582	AVANIRSKSRALFLSAAVFC	Homo sapiens
1432	4687	1	Thrombin Receptor	P25116	2583	SINKSSPLQKQLPAFISE	Homo sapiens

1433	4687	Thrombin Receptor	P25116	2621	DPRSFLLRNPNDKYEFW	Homo sapiens
1434	4734	Thyrotropin Releasing Hormone Receptor	P34981	1196	PSDPKENSKTWKNDS	Homo sapiens
1435	4734	Thyrotropin Releasing Hormone Receptor	P34981	1197	CFNSTVSSRKQVTKMLA	Homo sapiens
1436	4734	Thyrotropin Releasing Hormone Receptor	P34981	1198	RAAFRKLCKCKQKPT	Homo sapiens
1437	4734	Thyrotropin Releasing Hormone Receptor	P34981	1199	KPANYSVAlNYSVIKE	Homo sapiens
1438	4734	Thyrotropin Releasing Hormone Receptor	P34981	1200	KESDHFSTELDDITVD	Homo sapiens
1439	4944	Angiotensin II Type 1 Receptor	NP_000676.1	1771	EIQKNKPRNDIDIKII	Homo sapiens
1440	4944	Angiotensin II Type 1 Receptor	NP_000676.1	1772	SYRPSDNVSSSTKKPAPC	Homo sapiens
1441	4944	Angiotensin II Type 1 Receptor	NP_000676.1	1773	LNSSTEDGIKRIQDDC	Homo sapiens
1442	4946	Angiotensin II Type 2 Receptor	P50052	1321	CSQKPSDKHLDAPIL	Homo sapiens
1443	4946	Angiotensin II Type 2 Receptor	P50052	1322	DRYQSVVYFPLSQRRN	Homo sapiens
1444	4946	Angiotensin II Type 2 Receptor	P50052	1323	RKHLTKTNSYGKNRITRD	Homo sapiens
1445	4946	Angiotensin II Type 2 Receptor	P50052	1324	RVPTWLQGKRESMSC	Homo sapiens
1446	5072	Pyrimidinergic Receptor P2Y4	P51582	1142	CHDTRPEEFHDYVHFSSA	Homo sapiens
1447	5072	Pyrimidinergic Receptor P2Y4	P51582	1145	YLLTGDKYRRQLRQLC	Homo sapiens
1448	5072	Pyrimidinergic Receptor P2Y4	P51582	2696	HPLRALRWGRPRLAG	Homo sapiens
1449	5072	Pyrimidinergic Receptor P2Y4	P51582	2697	HIIRTIYLLARLLEADC	Homo sapiens
1450	5117	Vasopressin V1A Receptor	AAA62271.1	262	REAEALGEGNGPPRDVRNEE	Homo sapiens
1451	5117	Vasopressin V1A Receptor	AAA62271.1	263	NVRGKTASRQSGKGAEG	Homo sapiens
1452	5117	Vasopressin V1A Receptor	AAA62271.1	264	QNMKEKFNKEDTDSMSRRQ	Homo sapiens
1453	5117	Vasopressin V1A Receptor	AAA62271.1	265	RQTFYSNNRSPNTSGMWKD	Homo sapiens
1454	5118	Vasopressin V1B Receptor	AAA65687.1	266	NATPWLGDEELAKVE	Homo sapiens
1455	5118	Vasopressin V1B Receptor	AAA65687.1	267	TRGLPSRVSSINTISRAKIR	Homo sapiens

1456	5118	Vasopressin V1B Receptor	AAA65687.1	268	QPRMRRRLSDGSLSRH	Homo sapiens
1457	5118	Vasopressin V1B Receptor	AAA65687.1	269	ESPRDLELADGEGTAET	Homo sapiens
1458	5119	Vasopressin V2 Receptor	CAA77746.1	270	SNSSQERPLDTRDPLARAE	Homo sapiens
1459	5119	Vasopressin V2 Receptor	CAA77746.1	271	RHGSGAHWNRPVLVAWAFS	Homo sapiens
1460	5119	Vasopressin V2 Receptor	CAA77746.1	272	CQVLIFREIHASLVPGPSE	Homo sapiens
1461	5119	Vasopressin V2 Receptor	CAA77746.1	273	RGRTPPSLGPQDESC	Homo sapiens
1462	5133	Peropsin	O14718	1147	KNEDGSVFSQTEHNIV	Homo sapiens
1463	5133	Peropsin	O14718	1148	IKYKELRTPTNAIIIN	Homo sapiens
1464	5133	Peropsin	O14718	1149	RKNDRSFVSYTMIVIA	Homo sapiens
1465	5133	Peropsin	O14718	1150	CTESLNRDWSDQIDVTIK	Homo sapiens
1466	5133	Peropsin	O14718	1151	VANKKFRRAMLAMFKC	Homo sapiens
1467	5519	Brain-Specific Angiogenesis Inhibitor 1	O14514	987	CGPAGRTSSRSQSLRSDAR	Homo sapiens
1468	5519	Brain-Specific Angiogenesis Inhibitor 1	O14514	988	EENRDKWEEAQLAGPN	Homo sapiens
1469	5519	Brain-Specific Angiogenesis Inhibitor 1	O14514	989	CRVVDREQEENGDSGG	Homo sapiens
1470	5519	Brain-Specific Angiogenesis Inhibitor 1	O14514	990	KRDKAPKSSFVGDGDI	Homo sapiens
1471	5519	Brain-Specific Angiogenesis Inhibitor 1	O14514	991	RKLQHAAEKDKEVLGP	Homo sapiens
1472	5520	Brain-Specific Angiogenesis Inhibitor 2	O60241	981	CLRPSPEEAVAQAESEVGR	Homo sapiens
1473	5520	Brain-Specific Angiogenesis Inhibitor 2	O60241	982	GSSNDLFTTEMRYGEE	Homo sapiens
1474	5520	Brain-Specific Angiogenesis Inhibitor 2	O60241	983	MARDGISDKSKKQKQAGSERC	Homo sapiens
1475	5520	Brain-Specific Angiogenesis Inhibitor 2	O60241	984	EDAPRARPEGTPRRAAK	Homo sapiens
1476	5520	Brain-Specific Angiogenesis Inhibitor 2	O60241	985	RSRTMPRTVPGSTMKMGSL	Homo sapiens
1477	5520	Brain-Specific Angiogenesis Inhibitor 2	O60241	986	KREKRWSVSSGGAASVC	Homo sapiens
1478	5521	Brain-Specific Angiogenesis Inhibitor 3	O60242	976	RRVFPTNFPGLQKKGE	Homo sapiens
1479	5521	Brain-Specific Angiogenesis Inhibitor 3	O60242	977	CNLTREAKRPPKEEFG	Homo sapiens
1480	5521	Brain-Specific Angiogenesis Inhibitor 3	O60242	978	KLKHRAGQMSEPHSGLTKC	Homo sapiens

1481	5521	Inhibitor 3 Brain-Specific Angiogenesis Inhibitor 3	O60242	979	CTDNLRGADMDIVHPQER	Homo sapiens
1482	5521	Brain-Specific Angiogenesis Inhibitor 3	O60242	980	SRSETGSTISSMISLERR	Homo sapiens
1483	6031	SIV/HIV Receptor BONZO	O00574	1101	NDSSQQEEHQDFLQFSK	Homo sapiens
1484	6031	SIV/HIV Receptor BONZO	O00574	1102	KATKAYNQQAKRMTWG	Homo sapiens
1485	6031	SIV/HIV Receptor BONZO	O00574	1103	KTLLHAGGFGQKHRSLK	Homo sapiens
1486	6031	SIV/HIV Receptor BONZO	O00574	1104	SLKFRKNFWKLVKDIGC	Homo sapiens
1487	6031	SIV/HIV Receptor BONZO	O00574	1105	KXSEDNSKTFASAHNV	Homo sapiens
1488	6204	Lysophosphatidic Acid Receptor Edg4	AAC27728.1	66	ERHRVMAVQLHSRLPRGR	Homo sapiens
1489	6204	Lysophosphatidic Acid Receptor Edg4	AAC27728.1	67	RRRVRQRMAEHVSCHPTRYRE	Homo sapiens
1490	6204	Lysophosphatidic Acid Receptor Edg4	AAC27728.1	68	NAAVWSCRDAEMIRRTERR	Homo sapiens
1491	6204	Lysophosphatidic Acid Receptor Edg4	AAC27728.1	69	RQRSTRESVHYTSSAQGGAST	Homo sapiens
1492	6213	C-C Chemokine Receptor 5	AAC50598.1	38	YSQYQFWKNFQTlk	Homo sapiens
1493	6213	C-C Chemokine Receptor 5	AAC50598.1	39	QQEAPERASSVTTRSTGEQE	Homo sapiens
1494	6213	C-C Chemokine Receptor 5	AAC50598.1	40	RSQKEGLHYTCSSHFPYSQ	Homo sapiens
1495	6213	C-C Chemokine Receptor 5	AAC50598.1	309	MDYQVSSPIVDINITYTSEPc	Homo sapiens
1496	6363	Chemokine (C-C motif) Receptor-like 2 (CCRl2)	O00421	1092	EDEYDVLIERGELESDEAEQC	Homo sapiens
1497	6363	Chemokine (C-C motif) Receptor-like 2 (CCRl2)	O00421	1093	KGNFFSARRRVPCGIITSVL	Homo sapiens
1498	6363	Chemokine (C-C motif) Receptor-like 2 (CCRl2)	O00421	1094	MRKTLRFREQRYSLFKLVFA	Homo sapiens
1499	6363	Chemokine (C-C motif) Receptor-like 2 (CCRl2)	O00421	1096	RSNTPLQPRGQSQAQGTSRE	Homo sapiens
1500	6446	Pael Receptor (GPR37)	AAC51281.1	127	GPGNSARDVLRARAPREEQG	Homo sapiens
1501	6446	Pael Receptor (GPR37)	AAC51281.1	129	DGGPPRRNGNSTNRRVRLKNP	Homo sapiens
1502	6446	Pael Receptor (GPR37)	AAC51281.1	130	LRQLSKEDLGFSGRAPAERC	Homo sapiens
1503	6446	Pael Receptor (GPR37)	AAC51281.1	131	PRGAVISGRSQEQSVKTVPG	Homo sapiens
1504	6446	Pael Receptor (GPR37)	AAC51281.1	1781	CIGKSSTVTSDDNDNEYTE	Homo sapiens
1505	6446	Pael Receptor (GPR37)	AAC51281.1	1806	CIGKSSTVTSDDNDNEYTE	Homo sapiens
1506	6536	Putative Neurotransmitter Receptor (PNR)	NP_005293.1 O14804	319	TDWETRLSQWLEEMPC	Homo sapiens

1507	6536	Putative Neurotransmitter Receptor (PNR)	O14804	320	KSLAGAAKHERKAAKT	Homo sapiens
1508	6536	Putative Neurotransmitter Receptor (PNR)	O14804	321	RKALKLTLSQKVFPQTIR	Homo sapiens
1509	6536	Putative Neurotransmitter Receptor (PNR)	O14804	485	HPAAFCYQVNGSCPR	Homo sapiens
1510	6777	G Protein-Coupled Receptor TM7SF1	O60478	788	KAKSKYSPPELLKYRLP	Homo sapiens
1511	6777	G Protein-Coupled Receptor TM7SF1	O60478	790	KTGNWERKVVSVRVA	Homo sapiens
1512	6777	G Protein-Coupled Receptor TM7SF1	O60478	791	KSVHSFDYDWNVSDQAD	Homo sapiens
1513	6777	G Protein-Coupled Receptor TM7SF1	O60478	792	RVRNPTKDLTNPQMVP	Homo sapiens
1514	6777	G Protein-Coupled Receptor TM7SF1	O60478	793	RYDSDDDLAWNIAPQGLQ	Homo sapiens
1515	6853	Purinergic Receptor P2Y11	O43190	865	PTLSFHLKRPQQGAGNC	Homo sapiens
1516	6853	Purinergic Receptor P2Y11	O43190	866	GALGRAVLRSPTMTVAE	Homo sapiens
1517	6853	Purinergic Receptor P2Y11	O43190	867	MRVLNVDAARRWSTRC	Homo sapiens
1518	6853	Purinergic Receptor P2Y11	O43190	868	CPGYRDSWNPEDAKSTGQA	Homo sapiens
1519	6853	Purinergic Receptor P2Y11	O43190	2299	CPANFLAAADDKLSGFQGD	Homo sapiens
1520	6853	Purinergic Receptor P2Y11	O43190	2300	ASNGLALYRFSIRKQR	Homo sapiens
1521	6921	G Protein-Coupled Receptor GPR39	AAC26082.1	137	CNRSSTRHHEQPETSN	Homo sapiens
1522	6921	G Protein-Coupled Receptor GPR39	AAC26082.1	139	PNQIRIRIMAAAKPKHD	Homo sapiens
1523	6921	G Protein-Coupled Receptor GPR39	AAC26082.1	140	EKRLRVHAHSTDSAR	Homo sapiens
1524	6921	G Protein-Coupled Receptor GPR39	AAC26082.1	141	VQIRPLLFASTRRQSSARRTEK	Homo sapiens
1525	6921	G Protein-Coupled Receptor GPR39	AAC26082.1	142	QSEAEPSQSKSQSLLESLEP	Homo sapiens
1526	7221	Galanin Receptor GalR2	AAC39634.1	197	NLTVCHPAWSAPRRRAMD	Homo sapiens
1527	7221	Galanin Receptor GalR2	AAC39634.1	198	RAVDPVVAAGSGARRAKRK	Homo sapiens
1528	7221	Galanin Receptor GalR2	AAC39634.1	199	GRAPGRASGRVCAAARG	Homo sapiens
1529	7221	Galanin Receptor GalR2	AAC39634.1	200	ERESDLLHMSEAAAGALRPC	Homo sapiens
1530	7246	Orexin Receptor 1	AAC39601.1	235	DQLGDLEQGLSGEPQP	Homo sapiens
1531	7246	Orexin Receptor 1	AAC39601.1	236	EPSATPGAQMGVPPGSR	Homo sapiens

1532	7246	Orexin Receptor 1	AAC39601.1	237	KRPDQLGLDLEQGLSGEPQ	Homo sapiens
1533	7246	Orexin Receptor 1	AAC39601.1	239	KAPSPRSSASHKSLQSRC	Homo sapiens
1534	7247	Orexin Receptor 2	AAC39602.1	240	SELNETQEPFLNPTDYDDEE	Homo sapiens
1535	7247	Orexin Receptor 2	AAC39602.1	241	KWKPLQPVSQPRGPGQ	Homo sapiens
1536	7247	Orexin Receptor 2	AAC39602.1	242	TKSRMSAVAAEIKQIRA	Homo sapiens
1537	7247	Orexin Receptor 2	AAC39602.1	243	RQEDRLTRGRISTESRKS	Homo sapiens
1538	8436	Platelet-Activating Factor Receptor	P25105	1097	AVTRPIKTAQANTRKR	Homo sapiens
1539	8436	Platelet-Activating Factor Receptor	P25105	1098	DSTNTVPSAGSGNVTRC	Homo sapiens
1540	8436	Platelet-Activating Factor Receptor	P25105	1099	QQRNAEVKRRALWMVC	Homo sapiens
1541	8436	Platelet-Activating Factor Receptor	P25105	1100	KKFRKHLTEKFYSMRSRKC	Homo sapiens
1542	8509	G Protein-Coupled Receptor Ls8509	Q14439	398	DRYVSVLYPLERKISDAKSR	Homo sapiens
1543	8509	G Protein-Coupled Receptor Ls8509	Q14439	400	DEESEAKYIGSADFQAKE	Homo sapiens
1544	8509	G Protein-Coupled Receptor Ls8509	Q14439	401	ETRNSKKRLLPPLGNTPPEE	Homo sapiens
1545	8509	G Protein-Coupled Receptor Ls8509	Q14439	402	ELQTKVPKVGRVERKMSR	Homo sapiens
1546	8896	Neuropeptide Y Receptor Type 6 Pseudogene	Q99463	1078	KKQRKAQNFTSIJAN	Homo sapiens
1547	8896	Neuropeptide Y Receptor Type 6 Pseudogene	Q99463	1079	FRNLSLPTDLYTHQVAC	Homo sapiens
1548	8896	Neuropeptide Y Receptor Type 6 Pseudogene	Q99463	1080	CVENWPSKKDRLLFTT	Homo sapiens
1549	8896	Neuropeptide Y Receptor Type 6 Pseudogene	Q99463	1081	CLRRRNAKVDDKKENEGR	Homo sapiens
1550	9421	Neuropeptide Y Receptor Type 1	P25929	1064	DEPFQNVTLDAVKDKYVC	Homo sapiens
1551	9421	Neuropeptide Y Receptor Type 1	P25929	1065	CYFKIVIRLKRNRNMMMDK	Homo sapiens
1552	9421	Neuropeptide Y Receptor Type 1	P25929	1066	CDFRSRDDDDYETIAMS	Homo sapiens
1553	9421	Neuropeptide Y Receptor Type 1	P25929	1498	ENDDCHLPLAMIFTLALA	Homo sapiens
1554	9421	Neuropeptide Y Receptor	P25929	2291	SNFSEKNAQLLAFENDDC	Homo sapiens

1555	9834	Type 1 Corticotropin releasing factor Receptor 1	NP_004373.1	1778	CESLSLASISDNGYRE	Homo sapiens
1556	9834	Corticotropin releasing factor Receptor 1	NP_004373.1	1779	CQEILNEEKSKVHYHVA	Homo sapiens
1557	10457	Frizzled-2	NP_001457.1	1774	NHSEDGAPALLTAPP	Homo sapiens
1558	10457	Frizzled-2	NP_001457.1	1775	GGAPPRYATLEHPFHC	Homo sapiens
1559	10457	Frizzled-2	NP_001457.1	1776	CEPARPDGSMFFSQEE	Homo sapiens
1560	11968	Putative Leukocyte Platelet- Activating Factor Receptor (HUMNPIIY20)	AAB97766.1	1082	AAREAGAAVRRPLGPE	Homo sapiens
1561	11968	Putative Leukocyte Platelet- Activating Factor Receptor (HUMNPIIY20)	AAB97766.1	1083	LYRRPPREKIGRRRA	Homo sapiens
1562	11968	Putative Leukocyte Platelet- Activating Factor Receptor (HUMNPIIY20)	AAB97766.1	1085	PRELAAGQSFHGCLYR	Homo sapiens
1563	11968	Putative Leukocyte Platelet- Activating Factor Receptor (HUMNPIIY20)	AAB97766.1	1086	CKTVRLSDVRVRPVNTYAR	Homo sapiens
1564	14198	Interleukin-8 Receptor B	P25025	802	EDFWKGEDLSNVSYS	Homo sapiens
1565	14198	Interleukin-8 Receptor B	P25025	803	PPFLDDAAPCEPESLE	Homo sapiens
1566	14198	Interleukin-8 Receptor B	P25025	804	RRTVYSSNVSPACYE	Homo sapiens
1567	14198	Interleukin-8 Receptor B	P25025	805	SKDSLPKDSRPSFVGS	Homo sapiens
1568	14641	Calcitonin Receptor	P30988	766	PKFLYVVGKKMMDAQYKC	Homo sapiens
1569	14641	Calcitonin Receptor	P30988	769	VEVVPNGELVRRDPVSC	Homo sapiens
1570	14641	Calcitonin Receptor	P30988	771	KIQWNQRWGRRPSNRS	Homo sapiens
1571	14641	Calcitonin Receptor	P30988	772	CHQEPNNEPANNGEESAE	Homo sapiens
1572	16041	C-C Chemokine Receptor 6	P51684	355	TKSRRLRSRTLPRSKIIC	Homo sapiens
1573	16041	C-C Chemokine Receptor 6	P51684	356	STFVFNQKYNTQGSVDVCE	Homo sapiens
1574	16041	C-C Chemokine Receptor 6	P51684	357	TAANLGKMINRSCQSE	Homo sapiens
1575	16041	C-C Chemokine Receptor 6	P51684	358	RYSENISRQTSETADNDNAS	Homo sapiens
1576	16599	Smoothed	NP_005622.1	2595	CPLAPPELHPPAPAP	Homo sapiens
1577	16599	Smoothed	NP_005622.1	2666	CAIVERERGWPDFLR	Homo sapiens
1578	16599	Smoothed	NP_005622.1	2667	CTNEVQNIKFNSSGQ	Homo sapiens
1579	16599	Smoothed	NP_005622.1	2668	CEVPLVRTDNPKSWE	Homo sapiens
1580	16599	Smoothed	NP_005622.1	2669	CRADGTMRLGEPTSNE	Homo sapiens

1581	16599	Smoothed	NP_005622.1	2670	EAEISPELQKRLGRKK	Homo sapiens
1582	16599	Smoothed	NP_005622.1	2671	ANVTIGLPTKQIPDC	Homo sapiens
1583	17250	G Protein-Coupled Receptor GPR45	O43898	1227	SNASDSGSTQLPAPLR	Homo sapiens
1584	17250	G Protein-Coupled Receptor GPR45	O43898	1228	CVLGYTELPADRAYVV	Homo sapiens
1585	17250	G Protein-Coupled Receptor GPR45	O43898	1249	LNTVRKNAVRVHNGSD	Homo sapiens
1586	17250	G Protein-Coupled Receptor GPR45	O43898	1272	KVPERIRRRIGPSTVYC	Homo sapiens
1587	17250	G Protein-Coupled Receptor GPR45	O43898	1273	DSLDIRQLTRAGLRRL	Homo sapiens
1588	17345	G Protein-Coupled Receptor D6	LR13	363	EDADAENSSFYVDYLDE	Homo sapiens
1589	17345	G Protein-Coupled Receptor D6	LR13	364	DKYLEIVHAQPYHRLTR	Homo sapiens
1590	17345	G Protein-Coupled Receptor D6	LR13	365	CVLVRLRPAGQGGRALK	Homo sapiens
1591	17345	G Protein-Coupled Receptor D6	LR13	366	DLGERQSENYPNKEDVGNK	Homo sapiens
1592	17535	Gaba(b) Receptor 1	O95375	188	EKLTKRLKRHPETGGFQEA	Homo sapiens
1593	17535	Gaba(b) Receptor 1	O95375	189	KKEEKKEWRKTLPEWK	Homo sapiens
1594	17535	Gaba(b) Receptor 1	O95375	190	DPLHRTIETFAKEPKEDID	Homo sapiens
1595	17535	Gaba(b) Receptor 1	O95375	191	YEIEVVCGREREVVGPKVRK	Homo sapiens
1596	17666	Glucagon-Like Peptide 1 Receptor	AAA17021.1	1205	SLWETVQKWREYRRQC	Homo sapiens
1597	17666	Glucagon-Like Peptide 1 Receptor	AAA17021.1	1206	LQKDNSSLPWRLDSEC	Homo sapiens
1598	17666	Glucagon-Like Peptide 1 Receptor	AAA17021.1	1208	CIVVSKLKANLMCKTD	Homo sapiens
1599	17666	Glucagon-Like Peptide 1 Receptor	AAA17021.1	1209	RWRLEHLHIQRDSSMKPLKC	Homo sapiens
1600	18471	G Protein-Coupled Receptor LOC51210	NP_057456.1	1520	CQVDETEEPDVHLPP	Homo sapiens
1601	18471	G Protein-Coupled Receptor LOC51210	NP_057456.1	1521	REGLEAAGAAGASAAAYSS	Homo sapiens
1602	18471	G Protein-Coupled Receptor LOC51210	NP_057456.1	1522	KLPSARAKIRITSSPI	Homo sapiens
1603	18471	G Protein-Coupled	NP_057456.1	1523	ESKSSIKRVLAITTVLS	Homo sapiens

1604	18471	Receptor LOC51210	NP_057456.1	1524	QGTLEILYPDAHLAED	Homo sapiens
1605	18471	G Protein-Coupled Receptor LOC51210	NP_057456.1	1525	PKTPLKERISLPSRRS	Homo sapiens
1606	19072	G Protein-Coupled Receptor LOC51210	ENSP00000164265	2030	SVVQLRRQRDPDFEWNEGLC	Homo sapiens
1607	19072	Receptor Ls19072	ENSP00000164265	2032	PAVGWHDTSERFYTHGC	Homo sapiens
1608	19072	G Protein-Coupled Receptor Ls19072	ENSP00000164265	2047	AVQVGRQADRRRAFTVPT	Homo sapiens
1609	19501	G Protein-Coupled Receptor Ls19072	Q9UIZ3	1513	EHEPAGEEALRQKRAVATK	Homo sapiens
1610	19501	G Protein-Coupled Receptor KIAA0758	Q9UIZ3	1514	ALRQKRAVATKSPTAE	Homo sapiens
1611	19501	G Protein-Coupled Receptor KIAA0758	Q9UIZ3	1515	CEKEVLSSNVSWRYEEQQLE	Homo sapiens
1612	19501	G Protein-Coupled Receptor KIAA0758	Q9UIZ3	1518	RLANNITGGWDSSGCYVEEGD	Homo sapiens
1613	19501	G Protein-Coupled Receptor KIAA0758	Q9UIZ3	1519	CKQEKSLFQISKSIG	Homo sapiens
1614	21632	G Protein-Coupled Receptor KIAA0758	BAA96055.1	2164	CTAFQRRREGGVPGTTPGSPG	Homo sapiens
1615	21632	G Protein-Coupled Receptor Ls21632	BAA96055.1	2166	APGTRASRRCDRAGRWE	Homo sapiens
1616	21632	G Protein-Coupled Receptor Ls21632	BAA96055.1	2167	CPAERVANNRGDFRWPR	Homo sapiens
1617	21632	G Protein-Coupled Receptor Ls21632	BAA96055.1	2171	QNPPEPEPPADQQLRFRC	Homo sapiens
1618	21632	G Protein-Coupled Receptor Ls21632	BAA96055.1	2175	VPLGGGAPGTRASRRC	Homo sapiens
1619	22315	G Protein-Coupled Receptor Ls21632	LR29	425	PAARVHRPSRCRYRD	Homo sapiens
1620	22315	G Protein-Coupled Receptor GPR92/GPR93	LR29	426	TLARPDATQSQRRRKTVRL	Homo sapiens
1621	22315	G Protein-Coupled Receptor GPR92/GPR93	LR29	427	RSKLVAASVPARDVRG	Homo sapiens
1622	22315	G Protein-Coupled Receptor GPR92/GPR93	LR29	428	AQSERSAVTTDATRPD	Homo sapiens

1623	22925	Latrophilin-3	O94867	1138	CSGKSTESSIGSGKTSGR	Homo sapiens
1624	22925	Latrophilin-3	O94867	1140	ENHQPHHYTRRRIPQD	Homo sapiens
1625	22925	Latrophilin-3	O94867	1141	ESVTSTQTEPPPAKC	Homo sapiens
1626	22925	Latrophilin-3	O94867	1497	SSASLNREGLLNARD	Homo sapiens
1627	25359	G Protein-Coupled Receptor GPR34	O95853	1255	DRYKINRSIQQRKAIT	Homo sapiens
1628	25359	G Protein-Coupled Receptor GPR34	O95853	1257	CFHYRDKHNAKGEAIFN	Homo sapiens
1629	25359	G Protein-Coupled Receptor GPR34	O95853	1258	RISKRSKFPNSGKYA	Homo sapiens
1630	25359	G Protein-Coupled Receptor GPR34	O95853	1259	CQLLFRRFQGEPSRSESTSE	Homo sapiens
1631	30698	G Protein-Coupled Receptor Ls30698	CAC27252.1	2721	RLQEILTFEKINKTR	Homo sapiens
1632	30698	G Protein-Coupled Receptor Ls30698	CAC27252.1	2722	KGKSRAAENASLGPTN	Homo sapiens
1633	30698	G Protein-Coupled Receptor Ls30698	CAC27252.1	2723	LLFGTIMDHKIRDALR	Homo sapiens
1634	30698	G Protein-Coupled Receptor Ls30698	CAC27252.1	2724	RPSIGSSKSQDVVIMIRI	Homo sapiens
1635	30875	G Protein-Coupled Receptor GPR87/GPR95	NP_076404.1	1579	KLPNNELHGQESHNSGN	Homo sapiens
1636	30875	G Protein-Coupled Receptor GPR87/GPR95	NP_076404.1	1580	SGNIRSDGPGKNTLHNEFD	Homo sapiens
1637	30875	G Protein-Coupled Receptor GPR87/GPR95	NP_076404.1	1581	RQFISQSSRRKRKHNSQIR	Homo sapiens
1638	30875	G Protein-Coupled Receptor GPR87/GPR95	NP_076404.1	1582	SHLDRLDESAQKILYYC	Homo sapiens
1639	30875	G Protein-Coupled Receptor GPR87/GPR95	NP_076404.1	1584	CRSFSRRLFKKSNIRTRSE	Homo sapiens
1640	30875	G Protein-Coupled Receptor GPR87/GPR95	NP_076404.1	1585	ESIRSLQSVRRSEVRIYYD	Homo sapiens
1641	31568	G Protein-Coupled Receptor RE2	O75963	331	CRKELSNLTEEKGEGGV	Homo sapiens
1642	31568	G Protein-Coupled Receptor RE2	O75963	332	EEDAQRTRGRKNSSTSTSS	Homo sapiens
1643	31568	G Protein-Coupled Receptor RE2	O75963	333	CFGDRYYREPFVQRQRTSR	Homo sapiens
1644	31568	G Protein-Coupled Receptor RE2	O75963	334	HSSSTGDTGFCSDSGNIL	Homo sapiens

1645	36534	Receptor RE2	O75473	1232	CQKLQKIDLRHNEIYEIKVD	Homo sapiens
1646	36534	G Protein-Coupled Receptor GPR49	O75473	1233	NKGDNSSMDDLHKKDA	Homo sapiens
1647	36534	G Protein-Coupled Receptor GPR49	O75473	1234	QDERDLEDLDFEED	Homo sapiens
1648	36534	G Protein-Coupled Receptor GPR49	O75473	1235	ERGFVKYSAKFETKA	Homo sapiens
1649	36534	G Protein-Coupled Receptor GPR49	O75473	1236	RSKHPSLMSINSDDVEKQSC	Homo sapiens
1650	37498	Xenotropic and Polytropic Retrovirus Receptor (XPR1)	NP_004727.1	2597	DAQKESTGVTLRQRR	Homo sapiens
1651	37498	Xenotropic and Polytropic Retrovirus Receptor (XPR1)	NP_004727.1	2600	CKKINQLISETAUVTN	Homo sapiens
1652	37498	Xenotropic and Polytropic Retrovirus Receptor (XPR1)	NP_004727.1	2610	ADDQTLLQGMMDQDDG	Homo sapiens
1653	37498	Xenotropic and Polytropic Retrovirus Receptor (XPR1)	NP_004727.1	2672	KYNGSISLRPRLASQ	Homo sapiens
1654	37498	Xenotropic and Polytropic Retrovirus Receptor (XPR1)	NP_004727.1	2673	KRYFAKEEKEFFQTC	Homo sapiens
1655	37498	Xenotropic and Polytropic Retrovirus Receptor (XPR1)	NP_004727.1	2674	DGDRQKAMKRLRPPL	Homo sapiens
1656	40881	Lung Seven Transmembrane Receptor 2 (LUSTR2)	CAC28410.1	2103	RVRSGRVRSYSTRDFQDC	Homo sapiens
1657	40881	Lung Seven Transmembrane Receptor 2 (LUSTR2)	CAC28410.1	2105	CNNSVPGKEHPFDITVMIRE	Homo sapiens
1658	40881	Lung Seven Transmembrane Receptor 2 (LUSTR2)	CAC28410.1	2106	APSKPGLPKPQATVPRKVD	Homo sapiens
1659	40881	Lung Seven Transmembrane Receptor 2 (LUSTR2)	CAC28410.1	2135	AASKPKSTPAVIGGPSGKD	Homo sapiens
1660	42697	G Protein-Coupled Receptor GPR64	O00406	1261	KRSELNKTQLTSETYFIMC	Homo sapiens
1661	42697	G Protein-Coupled Receptor GPR64	O00406	1262	GNASTERNGVSFSVQNGDVC	Homo sapiens
1662	42697	G Protein-Coupled Receptor GPR64	O00406	1263	CRICKKKQLGAGRKTSIQD	Homo sapiens
1663	42697	G Protein-Coupled Receptor GPR64	O00406	1264	DFTGKGQHMFKNEKEDSC	Homo sapiens

1664	45937	KIAA1624 Protein	AAK57695	2072	PNVNPASAGNQIQKTQD	Homo sapiens
1665	45937	KIAA1624 Protein	AAK57695	2073	RVKSPPEAGTQLPKIIFS	Homo sapiens
1666	45937	KIAA1624 Protein	AAK57695	2074	KDGYMVVNVNSSLNPEP	Homo sapiens
1667	45937	KIAA1624 Protein	AAK57695	2076	RSTVDSKAMGEKFSVHNG	Homo sapiens
1668	50847	Neurotensin Receptor type 2	O95665	1265	CQPLRARSLTPRTR	Homo sapiens
1669	50847	Neurotensin Receptor type 2	O95665	1266	GQKHELETADGEPEASRVC	Homo sapiens
1670	50847	Neurotensin Receptor type 2	O95665	1267	KKTFIQGGQVSLVRHKD	Homo sapiens
1671	50847	Neurotensin Receptor type 2	O95665	1269	CGEHHPMKRLPPKQSP	Homo sapiens
1672	50847	Neurotensin Receptor type 2	O95665	2294	STSTPGSSTPSRLELSEE	Homo sapiens
1673	50847	Neurotensin Receptor type 2	O95665	2301	METSSPRPPRPSSNPG	Homo sapiens
1674	50847	Neurotensin Receptor type 2	O95665	2302	CSQVPSTSTPGSSTPSR	Homo sapiens
1675	53440	G Protein-Coupled Receptor LS53440	LR76	1850	DPNGNESSATVFILIG	Homo sapiens
1676	53440	G Protein-Coupled Receptor LS53440	LR76	1851	RHATVLTLPRTKIGV	Homo sapiens
1677	53440	G Protein-Coupled Receptor LS53440	LR76	1852	ILKTVLGLTREAQAKA	Homo sapiens
1678	53440	G Protein-Coupled Receptor LS53440	LR76	1853	HRFSKRDRDSPLPVILAN	Homo sapiens
1679	53440	G Protein-Coupled Receptor LS53440	LR76	1854	KEIRQRILRLFHVATHASE	Homo sapiens
1680	54053	Gaba(b) Receptor 2	O75899	1416	GEDIEISDTESFSNDPC	Homo sapiens
1681	54053	Gaba(b) Receptor 2	O75899	1417	SSKQIKTISGKTPQQYE	Homo sapiens
1682	54053	Gaba(b) Receptor 2	O75899	1419	AATQNRRFQFTQNKKE	Homo sapiens
1683	54053	Gaba(b) Receptor 2	O75899	1420	CKDPIEDINSPEHIQRR	Homo sapiens
1684	55728	ETL protein	NP_071442.1	2113	CVLSRKIQEEYVRLFKNVP	Homo sapiens
1685	55728	ETL protein	NP_071442.1	2114	CIAANINKLTIRSIKEP	Homo sapiens
1686	55728	ETL protein	NP_071442.1	2115	KLSVNHRRTHLTCLMHTVE	Homo sapiens
1687	55728	ETL protein	NP_071442.1	2116	EKITFTLSHRKVTDYRSLC	Homo sapiens
1688	55728	ETL protein	NP_071442.1	2117	SSSLLGYKNNTISAKD	Homo sapiens
1689	56923	Muscarinic acetylcholine	P20309	1421	CSYELQQQSMKRSNRK	Homo sapiens

1690	56923	Receptor M3	P20309	1422	KPSSEQMDQDHSSSDSWNNIN	Homo sapiens
1691	56923	Muscarinic acetylcholine Receptor M3	P20309	1423	DLERKADKLQAQKSVD	Homo sapiens
1692	56923	Muscarinic acetylcholine Receptor M3	P20309	1424	KEATLAKRFALKTRSQ	Homo sapiens
1693	57180	Leukotriene B4 Receptor BLTR2	NP_062813.1	2097	PPTCRPRRMSVCYRPPGNE	Homo sapiens
1694	57180	Leukotriene B4 Receptor BLTR2	NP_062813.1	2098	CLAVTRPFLAPRLRSPALAR	Homo sapiens
1695	57180	Leukotriene B4 Receptor BLTR2	NP_062813.1	2099	RGARWGSGRHGARGVR	Homo sapiens
1696	57180	Leukotriene B4 Receptor BLTR2	NP_062813.1	2100	TAGDLLPRAGPRFLTR	Homo sapiens
1697	57180	Leukotriene B4 Receptor BLTR2	NP_062813.1	2101	EGSGEARGGGRSREGTME	Homo sapiens
1698	57180	Leukotriene B4 Receptor BLTR2	NP_062813.1	2102	RTTPQLKVVGQGRGNGD	Homo sapiens
1699	73584	Cadherin EGF LAG Seven-Pass G-Type Receptor 1 (CELSR1/Flamingo)	NP_055061.1	1909	RSAPTALSRRLRARTHLPGC	Homo sapiens
1700	73584	Cadherin EGF LAG Seven-Pass G-Type Receptor 1 (CELSR1/Flamingo)	NP_055061.1	1910	VRGSHGEPDASLMRSC	Homo sapiens
1701	73584	Cadherin EGF LAG Seven-Pass G-Type Receptor 1 (CELSR1/Flamingo)	NP_055061.1	1911	RKEDSVLMEATSGGPTSF	Homo sapiens
1702	73584	Cadherin EGF LAG Seven-Pass G-Type Receptor 1 (CELSR1/Flamingo)	NP_055061.1	1912	DQNKADIGGMLPGLTVRSV	Homo sapiens
1703	73584	Cadherin EGF LAG Seven-Pass G-Type Receptor 1 (CELSR1/Flamingo)	NP_055061.1	1913	PAGWPDQSLAESDSEDPG	Homo sapiens
1704	74514	5-HT5A Receptor	NP_076917.1	2118	ETNHSLGKDLRPSP	Homo sapiens
1705	74514	5-HT5A Receptor	NP_076917.1	2119	SLVHELSGRRWQLGRRLC	Homo sapiens
1706	74514	5-HT5A Receptor	NP_076917.1	2120	LLFGWGETYSEGSEEC	Homo sapiens
1707	74514	5-HT5A Receptor	NP_076917.1	2121	FRVGSRTKNSVSPISE	Homo sapiens
1708	74514	5-HT5A Receptor	NP_076917.1	2122	RHATVTFQPEGDTWREQ	Homo sapiens

1709	81765	Thromboxane A2 Receptor	P21731	1277	GITRPFRRPAVASQRR	Homo sapiens
1710	81765	Thromboxane A2 Receptor	P21731	1278	CHVYHGQEAQQRRPRDSEVE	Homo sapiens
1711	81765	Thromboxane A2 Receptor	P21731	1279	RNPPAMSPAGQLSRITE	Homo sapiens
1712	81765	Thromboxane A2 Receptor	P21731	1280	RRLQPRLSTRPRRVSLC	Homo sapiens
1713	98519	Chemokine (C motif) XC Receptor 1 (CCXCR1)	AAA62837.1	155	RYLSVVSPSLTRVPTLRC	Homo sapiens
1714	98519	Chemokine (C motif) XC Receptor 1 (CCXCR1)	AAA62837.1	156	SSILDITIFHKVLSSGCDYSE	Homo sapiens
1715	98519	Chemokine (C motif) XC Receptor 1 (CCXCR1)	AAA62837.1	157	VEILRTLFRSRKRHRITVK	Homo sapiens
1716	98519	Chemokine (C motif) XC Receptor 1 (CCXCR1)	AAA62837.1	158	QTLFRTQIIRSCEAKQQLLE	Homo sapiens
1717	98519	Chemokine (C motif) XC Receptor 1 (CCXCR1)	AAA62837.1	159	RLQAPSPASIPHSPGAFAYE	Homo sapiens
1718	130108	G Protein-Coupled Receptor GPR75	NP_006785.1	1589	RIEPVYSYNSSPSQEE	Homo sapiens
1719	130108	G Protein-Coupled Receptor GPR75	NP_006785.1	1590	IMIAQTLRKNAQVRKC	Homo sapiens
1720	130108	G Protein-Coupled Receptor GPR75	NP_006785.1	1591	RNQNYNKLQHVQTRGYTKS	Homo sapiens
1721	130108	G Protein-Coupled Receptor GPR75	NP_006785.1	1592	SRLQLVSAINLSTAKD	Homo sapiens
1722	130108	G Protein-Coupled Receptor GPR75	NP_006785.1	1593	CKQKTRLRAMGKGNLEVNIR	Homo sapiens
1723	130108	G Protein-Coupled Receptor GPR75	NP_006785.1	1594	NSAYMLSPKPQKKFVDQA'C	Homo sapiens
1724	133117	G Protein-Coupled Receptor RAIG1	AAC98506.1	1218	CKVQDSNRRKMLPTQF	Homo sapiens
1725	133117	G Protein-Coupled Receptor RAIG1	AAC98506.1	1219	HAVSLTKLVRGRKPLS	Homo sapiens
1726	133117	G Protein-Coupled Receptor RAIG1	AAC98506.1	1220	NVNVFSELSAPRRNED	Homo sapiens
1727	133117	G Protein-Coupled Receptor RAIG1	AAC98506.1	1221	TKQRNPMMDYPVEDAFC	Homo sapiens
1728	133117	G Protein-Coupled Receptor RAIG1	AAC98506.1	1222	CKPQLVKKSYGVENRA	Homo sapiens
1729	152198	Tachykinin Receptor 2	AAB05897.1	1286	RRVVPGHQAHGANLRH	Homo sapiens
1730	152198	Tachykinin Receptor 2	AAB05897.1	1287	KEDKLELPTTSLTRVNRC	Homo sapiens
1731	152198	Tachykinin Receptor 2	AAB05897.1	1288	KETLFMAGDTAPSEATSGEA	Homo sapiens

1732	152198	Tachykinin Receptor 2	AAB05897.1	1290	CVVAWPEDSGGKTL	Homo sapiens
1733	152201	Thyrotropin Receptor	P16473	1445	RQRKSVNALNSPLHQE	Homo sapiens
1734	152201	Thyrotropin Receptor	P16473	1446	KFQDTHNNAHWVFFEEQED	Homo sapiens
1735	152201	Thyrotropin Receptor	P16473	1449	CHVKIVTVRNPNQNPQDK	Homo sapiens
1736	152201	Thyrotropin Receptor	P16473	1450	CKRQAQAYRGQRVPPKNSID	Homo sapiens
1737	152245	C-C Chemokine Receptor 2	NP_000639.1	1896	SRSRFRNTNESGEEVT	Homo sapiens
1738	152245	C-C Chemokine Receptor 2	NP_000639.1	1898	CQKEDSVVCGPYFPRGWNIN	Homo sapiens
1739	152245	C-C Chemokine Receptor 2	NP_000639.1	1899	SGEEVTFFDYDYGAPCHKF	Homo sapiens
1740	152299	Interleukin-8 Receptor A	P25024	806	DFDDLNTFTGMPPADEDYSPC	Homo sapiens
1741	152299	Interleukin-8 Receptor A	P25024	807	CWGLSMNLSLPFLFRQAYH	Homo sapiens
1742	152299	Interleukin-8 Receptor A	P25024	808	RHRVTSYTSSSVNVSSN	Homo sapiens
1743	152299	Interleukin-8 Receptor A	P25024	1490	CMLETETLNKYVVIAYALV	Homo sapiens
1744	158822	Mas Proto-Oncogene	NP_002368.1	1527	EEPTNISTGRNASVGNNAHRQ	Homo sapiens
1745	158822	Mas Proto-Oncogene	NP_002368.1	1528	RRNPFTVWTHLSIAD	Homo sapiens
1746	158822	Mas Proto-Oncogene	NP_002368.1	1529	YVMCIDREEESHRSRNDCAV	Homo sapiens
1747	158822	Mas Proto-Oncogene	NP_002368.1	1530	SSTILVVKIRKNTWASHSK	Homo sapiens
1748	158822	Mas Proto-Oncogene	NP_002368.1	1531	TRAFKDEMQPRRQKDN	Homo sapiens
1749	159152	G Protein-Coupled Receptor GPR43	NP_005297.1	1578	ERYLGVAFPVQYKLSRPL	Homo sapiens
1750	159152	G Protein-Coupled Receptor GPR43	NP_005297.1	1586	QYLNTEQVRSGNEITC	Homo sapiens
1751	159152	G Protein-Coupled Receptor GPR43	NP_005297.1	1588	EGTNEDRGVGQGGEMPSSD	Homo sapiens
1752	159152	G Protein-Coupled Receptor GPR43	NP_005297.1	1616	RGLQVLRNQGSLLGRRGKD	Homo sapiens
1753	159973	Vasoactive Intestinal Polypeptide Receptor 1	P32241	1292	KQCLEEAQLENETIGCS	Homo sapiens
1754	159973	Vasoactive Intestinal Polypeptide Receptor 1	P32241	1296	KDLALFDSGESDQCSE	Homo sapiens
1755	159973	Vasoactive Intestinal Polypeptide Receptor 1	P32241	1297	LQKLPPDIRKSDSSP	Homo sapiens
1756	159973	Vasoactive Intestinal Polypeptide Receptor 1	P32241	1298	NPKYRHPSGGSNGATC	Homo sapiens
1757	160040	Vasoactive Intestinal Polypeptide Receptor 2	P41587	1299	KVFSNFYSKAGNISKNC	Homo sapiens
1758	160040	Vasoactive Intestinal Polypeptide Receptor 2	P41587	1301	CGYSDPEDESKITFYI	Homo sapiens
1759	160040	Vasoactive Intestinal Polypeptide Receptor 2	P41587	1305	KRKWRSRCPTPSASRD	Homo sapiens

1760	160040	Polypeptide Receptor 2 Vasoactive Intestinal	P41587	1306	CGSFSRNGSEGALQFHR	Homo sapiens
1761	160055	Polypeptide Receptor 2 Motilin Receptor (GPR38)	AAC26081.1	132	REPPWPALPPCDERRCS	Homo sapiens
1762	160055	Motilin Receptor (GPR38)	AAC26081.1	134	SPSPGPETAEEAALFSREC	Homo sapiens
1763	160055	Motilin Receptor (GPR38)	AAC26081.1	135	SSRRPLRGPAASGRERGHRC	Homo sapiens
1764	160055	Motilin Receptor (GPR38)	AAC26081.1	136	RKSRPRGFHRSRDITAG	Homo sapiens
1765	160059	G Protein-coupled Receptor GPR40	NP_005294.1	1595	NPLVTGYLGRGPGGLKTV	Homo sapiens
1766	160059	G Protein-coupled Receptor GPR40	NP_005294.1	1596	GRYLGAAPPLGYQAFRRPC	Homo sapiens
1767	160059	G Protein-coupled Receptor GPR40	NP_005294.1	1597	CLEAWDPASAGPARFS	Homo sapiens
1768	160059	G Protein-coupled Receptor GPR40	NP_005294.1	1598	CLRALARSGLTHRRKLR	Homo sapiens
1769	160059	G Protein-coupled Receptor GPR40	NP_005294.1	1599	NASNVASFLYPNLGGSWRK	Homo sapiens
1770	160059	G Protein-coupled Receptor GPR40	NP_005294.1	1617	TVSLPLKAVEALASGA	Homo sapiens
1771	160059	G Protein-coupled Receptor GPR40	NP_005294.1	1618	DHSNTSLGINTPVNGSPVC	Homo sapiens
1772	160189	G Protein-Coupled Receptor GPR54	BAB55446	1926	CSEAFPSRALERAFALY	Homo sapiens
1773	160189	G Protein-Coupled Receptor GPR54	BAB55446	1927	ERAGAVRAKVSRVLAAVV	Homo sapiens
1774	160189	G Protein-Coupled Receptor GPR54	BAB55446	1928	RRPGPSDPAAPHAELHRLGS	Homo sapiens
1775	160189	G Protein-Coupled Receptor GPR54	BAB55446	1929	GAPANASGCPGCGANASD	Homo sapiens
1776	160202	Adrenomedullin Receptor (ADMR)	O15218	390	DLFNHTLSECHVELSQST	Homo sapiens
1777	160202	Adrenomedullin Receptor (ADMR)	O15218	391	NVLTACRLRQPGQPKSRRHC	Homo sapiens
1778	160202	Adrenomedullin Receptor (ADMR)	O15218	392	KDQTKAGTCASSSSCSTQ	Homo sapiens
1779	160202	Adrenomedullin Receptor (ADMR)	O15218	484	KGDSQPAAAPHPPEPSLS	Homo sapiens
1780	160204	G Protein-Coupled Receptor RTA	LR85	1977	CRARRRQRSTKLNHVILA	Homo sapiens

1781	160204	G Protein-Coupled Receptor RTA	LR85	1983	CPGLSEAPELYRRGFLTIEQ	Homo sapiens
1782	160204	G Protein-Coupled Receptor RTA	LR85	1985	RDGAELGEAGGSTPNTVT	Homo sapiens
1783	160204	G Protein-Coupled Receptor RTA	LR85	2173	LAGRDKSQRLWEPLRV	Homo sapiens
1784	160206	G Protein-Coupled Receptor GPR32	NP_001497.1	1678	RTTRKWNCGTCHCYLAFNSD	Homo sapiens
1785	160206	G Protein-Coupled Receptor GPR32	NP_001497.1	1679	RAKLLREGWVHANRPKR	Homo sapiens
1786	160206	G Protein-Coupled Receptor GPR32	NP_001497.1	1680	RRVMLKENYHPRMLLI	Homo sapiens
1787	160206	G Protein-Coupled Receptor GPR32	NP_001497.1	1682	SALARAFGEEEFLLSC	Homo sapiens
1788	160206	G Protein-Coupled Receptor GPR32	NP_001497.1	1683	RSCSRKMNSSGCLSEE	Homo sapiens
1789	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	AAD21055.1	151	PGPDRDATCNSRQAALAVSK	Homo sapiens
1790	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	AAD21055.1	152	SSHAAVSLRLQHRGRRRPGR	Homo sapiens
1791	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	AAD21055.1	153	DDSELGGAGSSRRRRTSSTA	Homo sapiens
1792	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	AAD21055.1	154	DGPPEPGAEGHLELEPGRR	Homo sapiens
1793	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	NP_004769.1	2220	CPILEQMSRLQSHSNTSIRY	Homo sapiens
1794	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	NP_004769.1	2221	RYIDHAAVLLHGLASLLGLV	Homo sapiens
1795	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	NP_004769.1	2222	CRMRTQTVVTWVHLALS DL	Homo sapiens
1796	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	NP_004769.1	2223	SASLPFFTYFLAVGHSWE	Homo sapiens
1797	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	NP_004769.1	2224	CLVLWALAVLNTVPYFVRD	Homo sapiens
1798	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	NP_004769.1	2225	CYNNVILLNPGPDRDAT	Homo sapiens
1799	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	NP_004769.1	2226	CNSRQAALAVSKFLLAFLVP	Homo sapiens
1800	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	NP_004769.1	2228	RGLPFTVTSIAFFNSVANPVL	Homo sapiens

1801	160210	Receptor GPR44 (CRTH2)	NP_004769.1	2229	CSRPEEPRGPARLLGWLLGS	Homo sapiens
1802	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	NP_004769.1	2230	CAASPQTGPLNRALSS	Homo sapiens
1803	160212	G Protein-Coupled Receptor GPR44 (CRTH2)	Q9V2T5	444	KEINDRRARFPSHEVDSSRE	Homo sapiens
1804	160212	G Protein-Coupled Receptor GPR52	Q9V2T5	445	CVKDGEAQEPKPRKRANS	Homo sapiens
1805	160212	G Protein-Coupled Receptor GPR52	Q9V2T5	446	RWTEWRILNMSSGIVNASER	Homo sapiens
1806	160212	G Protein-Coupled Receptor GPR52	Q9V2T5	622	HSCPLGFGHYSVVDVCIFE	Homo sapiens
1807	160217	G Protein-Coupled Receptor GPR55	AAD22410.1	161	GKVEKYMCFHNMSDDTWSAK	Homo sapiens
1808	160217	G Protein-Coupled Receptor GPR55	AAD22410.1	162	RSIHILLGRRDHTQDWVQQK	Homo sapiens
1809	160217	G Protein-Coupled Receptor GPR55	AAD22410.1	163	CRAKQSIFFLQLSM	Homo sapiens
1810	160217	G Protein-Coupled Receptor GPR55	AAD22410.1	164	KEFRMNIRAHPRSRVQLVLQ	Homo sapiens
1811	160219	G Protein-Coupled Receptor GPR35	AAC52028.1	2	AQRPTDVGQAEATRKAAR	Homo sapiens
1812	160219	G Protein-Coupled Receptor GPR35	AAC52028.1	3	KEFQEASALAVAPRAKAHK	Homo sapiens
1813	160219	G Protein-Coupled Receptor GPR35	AAC52028.1	123	GGFCFRSTRHNFNSMR	Homo sapiens
1814	160219	G Protein-Coupled Receptor GPR35	AAC52028.1	125	ETIRRALYITSKLSDANC	Homo sapiens
1815	160221	G Protein-Coupled Receptor GPR27	LR6	335	FPPVLDGGGDDDEAPCALEQ	Homo sapiens
1816	160221	G Protein-Coupled Receptor GPR27	LR6	338	RGARRLLVLEEFKTEKRLC	Homo sapiens
1817	160221	G Protein-Coupled Receptor GPR27	LR6	496	NASEPGSGGGGEEAALGLK	Homo sapiens
1818	160221	G Protein-Coupled Receptor GPR27	O54897	515	GLRALACLPVMLAARRA	Mus musculus
1819	160221	G Protein-Coupled Receptor GPR27	LR6	1291	RPAGPGRGARRLLVLE	Homo sapiens

1820	160222	G Protein-Coupled Receptor GPR72	NP_057624.1	1606	CQRPPKQEDGQSPV	Homo sapiens
1821	160222	G Protein-Coupled Receptor GPR72	NP_057624.1	1607	CNMIGDVTTEQYFALRRK	Homo sapiens
1822	160222	G Protein-Coupled Receptor GPR72	NP_057624.1	1610	EGRADQSAEALAVP	Homo sapiens
1823	160222	G Protein-Coupled Receptor GPR72	NP_057624.1	1611	QNFVGRRRYGAESQNPTVK	Homo sapiens
1824	160223	G Protein-Coupled Receptor G2A	NP_037477.1	1600	RIFRSIKQSMGLSAAQKAK	Homo sapiens
1825	160223	G Protein-Coupled Receptor G2A	NP_037477.1	1601	CDRFVAVVVALESRRR	Homo sapiens
1826	160223	G Protein-Coupled Receptor G2A	NP_037477.1	1604	ATDHSRQEVSRHKGWKE	Homo sapiens
1827	160223	G Protein-Coupled Receptor G2A	NP_037477.1	1605	KTDVTRLTHSRDTEELQS	Homo sapiens
1828	160224	Endothelin Type B Receptor-Like Protein 2 (ETBR-LP-2)	O60883	403	ETQEQQSRSKRGTEDEAK	Homo sapiens
1829	160224	Endothelin Type B Receptor-Like Protein 2 (ETBR-LP-2)	O60883	404	SPNPDKDGTPDSGQELR	Homo sapiens
1830	160224	Endothelin Type B Receptor-Like Protein 2 (ETBR-LP-2)	O60883	405	CQLVTWRVRGPPGRKSE	Homo sapiens
1831	160224	Endothelin Type B Receptor-Like Protein 2 (ETBR-LP-2)	O60883	406	AANGSDNKLKTEVSS	Homo sapiens
1832	160225	Spingolipid Receptor Edg6	CAA04118.1	70	PRDSFRGSRSLFRMRE	Homo sapiens
1833	160225	Spingolipid Receptor Edg6	CAA04118.1	71	ERFATMVRPVAESGATKTSR	Homo sapiens
1834	160225	Spingolipid Receptor Edg6	CAA04118.1	72	RLVQASGQKAPRPAAR	Homo sapiens
1835	160225	Spingolipid Receptor Edg6	CAA04118.1	73	RAVEAHSGASTDSSLRPRD	Homo sapiens
1836	160225	Spingolipid Receptor Edg6	CAA04118.1	1914	IFRLVQASGQKAPRPAAR	Homo sapiens
1837	160225	Spingolipid Receptor Edg6	CAA04118.1	1915	DSSLRPRDSFRGSRSLFRM	Homo sapiens
1838	160225	Spingolipid Receptor Edg6	CAA04118.1	1916	RSLSFRMREPLSSSVR	Homo sapiens
1839	160225	Spingolipid Receptor Edg6	CAA04118.1	1917	GPEDGGLGALRGLSVAASC	Homo sapiens
1840	160228	T-Cell Death-Associated Gene 8 (GPR65)	NP_003599.1	1625	ANIGSLCVSFLQPKKE	Homo sapiens
1841	160228	T-Cell Death-Associated Gene 8 (GPR65)	NP_003599.1	1626	ETIFNAVMLWEDETVE	Homo sapiens
1842	160228	T-Cell Death-Associated Gene 8 (GPR65)	NP_003599.1	1627	CNRKVVQAVRHINKATENKE	Homo sapiens

1843	160228	T-Cell Death-Associated Gene 8 (GPR65)	NP_003599.1	1628	CILEHAVNFEDHSNSGKR	Homo sapiens
1844	160228	T-Cell Death-Associated Gene 8 (GPR65)	NP_003599.1	1629	CNTSQQRQRILSVSTKD	Homo sapiens
1845	160228	T-Cell Death-Associated Gene 8 (GPR65)	NP_003599.1	2303	CDAEKSNTLCYDKYPLEK	Homo sapiens
1846	160300	Encephalopsin	NP_055137.1	2131	CTVDWKSNDANDSSFV	Homo sapiens
1847	160300	Encephalopsin	NP_055137.1	2132	CVEDLQTIQVIKILKYEK	Homo sapiens
1848	160300	Encephalopsin	NP_055137.1	2133	CQRPADLPAAAGSEMQRIP	Homo sapiens
1849	160300	Encephalopsin	NP_055137.1	2134	TSDESLVDDSDKTIG	Homo sapiens
1850	160312	Sphingolipid Receptor Edg5	O95136	1018	ERHVAIAKVLYGSDKSC	Homo sapiens
1851	160312	Sphingolipid Receptor Edg5	O95136	1019	RSRDLRREVLRPLQC	Homo sapiens
1852	160312	Sphingolipid Receptor Edg5	O95136	1020	QEHYNYTKETLETQET	Homo sapiens
1853	160312	Sphingolipid Receptor Edg5	O95136	1021	GRRRVGTPGHHLLPLR	Homo sapiens
1854	160314	G Protein-Coupled Receptor GPR103	ENSMPT221753	1922	MMRKKAKFSURENPVEETKG	Homo sapiens
1855	160314	G Protein-Coupled Receptor GPR103	ENSMPT221753	1923	MMIEYSNFEKEYDDVTIKM	Homo sapiens
1856	160314	G Protein-Coupled Receptor GPR103	ENSMPT221753	1924	CEQTEKKKKLRHLALFRSE	Homo sapiens
1857	160314	G Protein-Coupled Receptor GPR103	ENSMPT221753	1925	KKRVGDGSLRTIHGKEMSK	Homo sapiens
1858	160317	Neuropeptide FF 2 Receptor	Q9Y5X5	463	DRARRERFIMNEKWDINSSE	Homo sapiens
1859	160317	Neuropeptide FF 2 Receptor	Q9Y5X5	464	RKNQEQWHVVSRRKKQIKK	Homo sapiens
1860	160317	Neuropeptide FF 2 Receptor	Q9Y5X5	465	RKSAEKPQQELVMEELKE	Homo sapiens
1861	160317	Neuropeptide FF 2 Receptor	Q9Y5X5	500	RQSAGDRRRLGLSRQTAK	Homo sapiens
1862	160324	G Protein-Coupled Receptor	NP_076403.1	1619	DRFLKIRPLRNIFLKKP	Homo sapiens
1863	160324	GPR86/GPR94/P2Y13 G Protein-Coupled Receptor	NP_076403.1	1620	MILSNKEATPSSVKKC	Homo sapiens
1864	160324	GPR86/GPR94/P2Y13 G Protein-Coupled Receptor	NP_076403.1	1622	VVDSYRKSksKDRKNN	Homo sapiens
1865	160324	GPR86/GPR94/P2Y13 G Protein-Coupled Receptor	NP_076403.1	1623	ARVPYTHSQTNNTKDC	Homo sapiens

1866	160324	G Protein-Coupled Receptor	NP_076403.1	1624	CMQGRKTTASSQENHSSQTD	Homo sapiens
1867	160329	GPR86/GPR94/P2Y13	O76067	1308	CANDSDTLELPDSSRA	Homo sapiens
1868	160329	Proteinase-Activated Receptor 4	O76067	1309	PLRARALRGRRRLALGLC	Homo sapiens
1869	160329	Proteinase-Activated Receptor 4	O76067	1310	LQRQIFRLARSDRVLC	Homo sapiens
1870	160329	Proteinase-Activated Receptor 4	O76067	1311	RDKVRAGLFQRSPGDT	Homo sapiens
1871	160330	G Protein-Coupled- Receptor TM7XN1/GPR56	Q9Y653	1213	CELKRDQLQLSQFLKHPQK	Homo sapiens
1872	160330	G Protein-Coupled- Receptor TM7XN1/GPR56	Q9Y653	1214	TSVRFMGDMVSFEEDR	Homo sapiens
1873	160330	G Protein-Coupled- Receptor TM7XN1/GPR56	Q9Y653	1215	RQEEEQSEIMEYSVLLP	Homo sapiens
1874	160330	G Protein-Coupled- Receptor TM7XN1/GPR56	Q9Y653	1216	RTLQRTKGRSGEAEKR	Homo sapiens
1875	160387	Glucagon-Like Peptide 2 Receptor	O95838	1312	GSLLFETTRKWAQYKQAC	Homo sapiens
1876	160387	Glucagon-Like Peptide 2 Receptor	O95838	1313	QTIENTADIWQDDSEC	Homo sapiens
1877	160387	Glucagon-Like Peptide 2 Receptor	O95838	1315	CPKKLSEGDGAELRK	Homo sapiens
1878	160387	Glucagon-Like Peptide 2 Receptor	O95838	1316	QQDHARWPRGSSLSEC	Homo sapiens
1879	160388	Latrophilin-1	O94910	1121	EPTSTHESEHQSGAWC	Homo sapiens
1880	160388	Latrophilin-1	O94910	1126	CEPREVRRVQWPATQQ	Homo sapiens
1881	160388	Latrophilin-1	O94910	1129	RSGDFPPGDGGPEPPR	Homo sapiens
1882	160388	Latrophilin-1	O94910	1131	CTAEDGATSRPLSSPPGRDS	Homo sapiens
1883	160388	Latrophilin-1	O94910	1706	RESAGKNYNKMKHKRRTC	Homo sapiens
1884	160388	Latrophilin-1	O94910	1707	RDSPSPDSSPEGPSEALP	Homo sapiens
1885	160390	Cadherin EGF LAG Seven-Pass G-Type Receptor 2 (CELSR2)	NP_001399.1	1938	QVGPCRSLSRGRGSSGAC	Homo sapiens
1886	160390	Cadherin EGF LAG Seven-Pass G-Type Receptor 2 (CELSR2)	NP_001399.1	1939	CRDAGTELTGHLVPHHDGLR	Homo sapiens

1887	160390	Cadherin EGF LAG Seven- Pass G-Type Receptor 2 (CELSR2)	NP_001399.1	1940	CKLAQAPGLRAGERSPEESL	Homo sapiens
1888	160390	Cadherin EGF LAG Seven- Pass G-Type Receptor 2 (CELSR2)	NP_001399.1	1942	RVSDTPEGVNSLDPSHGES	Homo sapiens
1889	160390	Cadherin EGF LAG Seven- Pass G-Type Receptor 2 (CELSR2)	NP_001399.1	1943	RSQKSGQPSYIPFLREES	Homo sapiens
1890	160397	Latrophilin-2	O95490	1132	CEALDSKGIKWPGTQR	Homo sapiens
1891	160397	Latrophilin-2	O95490	1133	DILDAQQLQELKPSEKO	Homo sapiens
1892	160397	Latrophilin-2	O95490	1136	RTHSLLYQPQKKVKSE	Homo sapiens
1893	160397	Latrophilin-2	O95490	1137	RDSPYPESPDMEEEDL	Homo sapiens
1894	160411	G Protein-Coupled Receptor GPR48	NP_060960.1	1630	CQEGKMLRTLDSYNNIRD	Homo sapiens
1895	160411	G Protein-Coupled Receptor GPR48	NP_060960.1	1631	CDSYANLNTEDNSLQD	Homo sapiens
1896	160411	G Protein-Coupled Receptor GPR48	NP_060960.1	1632	KGTAADAAVNTSTLENEE	Homo sapiens
1897	160411	G Protein-Coupled Receptor GPR48	NP_060960.1	1633	ERSLSAKDIMKNGKSNHLK	Homo sapiens
1898	160411	G Protein-Coupled Receptor GPR48	NP_060960.1	1634	CNLEKEDLSENSQSSMIK	Homo sapiens
1899	160411	G Protein-Coupled Receptor GPR48	NP_060960.1	1635	KRRVTKKSGSVSVSIS	Homo sapiens
1900	160411	G Protein-Coupled Receptor GPR48	NP_060960.1	1636	CGTQSAHSDYADEEDS	Homo sapiens
1901	160411	G Protein-Coupled Receptor GPR48	NP_060960.1	1637	DEEDSFVSDSSDQVQAC	Homo sapiens
1902	160435	LS160435 Receptor	LR80	1918	ATILKLRTEEAHGREQRR	Homo sapiens
1903	160435	LS160435 Receptor	LR80	1919	CRRVPRDTLDRRESLFSAR	Homo sapiens
1904	160435	LS160435 Receptor	LR80	1920	PLSSKRWRRRRYAVAAC	Homo sapiens
1905	160435	LS160435 Receptor	LR80	1921	CRRMGPRSPSVIFMINL	Homo sapiens
1906	160889	Platelet Activating Receptor Homolog (H963)	O14626	1223	MMIPIKDIKEKSNVGC	Homo sapiens
1907	160889	Platelet Activating Receptor Homolog (H963)	O14626	1224	CLVIRQLYRNKDNENYP	Homo sapiens
1908	160889	Platelet Activating Receptor	O14626	1225	CSTRISLFKAKEATLL	Homo sapiens

1909	160889	Homolog (H963) Platelet Activating Receptor	O14626	1226	ETFASPKETKAQKEKLRC	Homo sapiens
1910	161024	Homolog (H963) Protein A	NP_062832.1	1690	ESRAVGLPLGLSAGRRC	Homo sapiens
1911	161024	Protein A	NP_062832.1	1691	EDARGKRRSSLDGSESAK	Homo sapiens
1912	161024	Protein A	NP_062832.1	1692	RTVWEQCVAIMSEEDGD	Homo sapiens
1913	161024	Protein A	NP_062832.1	1693	CKVRFDANGATGPGSRD	Homo sapiens
1914	161024	Protein A	NP_062832.1	1694	RRLSHDETNIIFSTPRE	Homo sapiens
1915	161024	Protein A	NP_062832.1	1695	GGPPEYLGQRHRLDEED	Homo sapiens
1916	161024	Protein A	NP_062832.1	1696	REEITFIDETLPSP	Homo sapiens
1917	161024	Protein A	NP_062832.1	1697	RRRPLGLSPRRRLSLGSPE	Homo sapiens
1918	161214	Galanin Receptor GalR3	AAC35944.1	202	RYGALELCVPAWEDARR	Homo sapiens
1919	161214	Galanin Receptor GalR3	AAC35944.1	203	GAAAAEARRRATGRAGR	Homo sapiens
1920	161214	Galanin Receptor GalR3	AAC35944.1	204	ASRHFRRFRRLWPC	Homo sapiens
1921	161214	Galanin Receptor GalR3	AAC35944.1	205	RARRALRRVRPASSGPP	Homo sapiens
1922	161221	Urotensin-II Receptor (GPR14)	LR15	371	ERYAAVLRPLDVTQRPKG	Homo sapiens
1923	161221	Urotensin-II Receptor (GPR14)	LR15	372	RAYRRSQRASFKRRRPGAR	Homo sapiens
1924	161221	Urotensin-II Receptor (GPR14)	LR15	373	RNVYRDHLGRVVRGPGSG	Homo sapiens
1925	161221	Urotensin-II Receptor (GPR14)	LR15	374	RARFQRCSGRSLSCSPQPTD	Homo sapiens
1926	161249	G Protein-Coupled Receptor GPR66	LR20	394	ARGHFDPEDLNLTDALRLK	Homo sapiens
1927	161249	G Protein-Coupled Receptor GPR66	LR20	395	IGLRLRRERLLMQEAKGRG	Homo sapiens
1928	161249	G Protein-Coupled Receptor GPR66	LR20	396	RGSAAAARSRYTCRLQQH	Homo sapiens
1929	161249	G Protein-Coupled Receptor GPR66	LR20	397	ALCLGACCHRLRPRHSS	Homo sapiens
1930	161251	Purinergic Receptor P2Y10	O00398	859	CFFLLKPFRRARDWKRRYD	Homo sapiens
1931	161251	Purinergic Receptor P2Y10	O00398	860	PFPILRSTDNLNNKSC	Homo sapiens
1932	161251	Purinergic Receptor P2Y10	O00398	862	QLSRHGSSVTRSLMSKE	Homo sapiens
1933	161251	Purinergic Receptor P2Y10	O00398	863	LRQPPMAFGGISERQK	Homo sapiens
1934	161293	G Protein-Coupled Receptor Ls161293 (Herpes virus)	NP_042597.1	1672	YYDDLDDVDYEEASAPC	Equine herpesvirus 2

1935	161293	G Protein-Coupled Receptor Ls161293 (Herpes virus)	NP_042597.1	1674	CDPYPEMSTNVWRRRAHVAK	Equine herpesvirus 2
1936	161293	G Protein-Coupled Receptor Ls161293 (Herpes virus)	NP_042597.1	1675	CYYVIIRRLRRPSKK	Equine herpesvirus 2
1937	161293	G Protein-Coupled Receptor Ls161293 (Herpes virus)	NP_042597.1	1676	CKYIPFLSGDGEKGGPT	Equine herpesvirus 2
1938	177147	Neuromedin K Receptor-Like (NK-4R)	NP_0066670.1	1820	RNLTSSPAPTASPSPAPS	Homo sapiens
1939	177147	Neuromedin K Receptor-Like (NK-4R)	NP_0066670.1	1821	PSWTPSPRPGPAHPFLQPP	Homo sapiens
1940	177147	Neuromedin K Receptor-Like (NK-4R)	NP_0066670.1	1822	RSSHQKRGTRDVGSNVC	Homo sapiens
1941	177147	Neuromedin K Receptor-Like (NK-4R)	NP_0066670.1	1823	KSTTTASFVSSSHMSVEE	Homo sapiens
1942	177168	Cysteinyl Leukotriene Receptor	Q9Y271	1317	TSPFLMAKPKQDEKNNTKC	Homo sapiens
1943	177168	Cysteinyl Leukotriene Receptor	Q9Y271	1318	KKSMKKNLSSHKAIG	Homo sapiens
1944	177168	Cysteinyl Leukotriene Receptor	Q9Y271	1319	QRTIHLHFLHNETKPC	Homo sapiens
1945	177168	Cysteinyl Leukotriene Receptor	Q9Y271	1320	RKHLSSVTYVPRKKASLPE	Homo sapiens
1946	177191	Histamine H3 Receptor	Q9Y5N1	474	RAVSYRAQQGDTRRAVRK	Homo sapiens
1947	177191	Histamine H3 Receptor	Q9Y5N1	475	QRTIRLDGAREAAGPE	Homo sapiens
1948	177191	Histamine H3 Receptor	Q9Y5N1	476	QSFTQRFRLSRDRKVA	Homo sapiens
1949	177191	Histamine H3 Receptor	Q9Y5N1	477	RYGVGEAAVGAEGEATLG	Homo sapiens
1950	177191	Histamine H3 Receptor	Q9Y5N1	1477	SSRGTERPRSLKRGSKPSAS	Homo sapiens
1951	177191	Histamine H3 Receptor	Q9Y5N1	1479	KPSASSASLEKRMKMSVS	Homo sapiens
1952	177387	G Protein-Coupled Receptor ORF4	NP_064540.1	2052	RTLFSFYFRDTPRANR	Homo sapiens
1953	177387	G Protein-Coupled Receptor ORF4	NP_064540.1	2053	RPEMSRGLLAVRGAFV	Homo sapiens
1954	177387	G Protein-Coupled Receptor ORF4	NP_064540.1	2059	CAVLSHRRRAQPWALLLV	Homo sapiens
1955	177387	G Protein-Coupled Receptor ORF4	NP_064540.1	2733	RVLVSDSLFVICALSL	Homo sapiens

1956	180956	Lysophosphatidic Acid Receptor Edg7	AAF00530.1	1014	KRKTNVLSPTSGSIS	Homo sapiens
1957	180956	Lysophosphatidic Acid Receptor Edg7	AAF00530.1	1015	CFSQENPERRPSRIPST	Homo sapiens
1958	180956	Lysophosphatidic Acid Receptor Edg7	AAF00530.1	1016	SYKDEDMYGTMKKMIC	Homo sapiens
1959	180956	Lysophosphatidic Acid Receptor Edg7	AAF00530.1	1017	VERHMSIMRMVRVHSN	Homo sapiens
1960	189873	G Protein-Coupled Receptor GPR78	LR37	443	CQRMDVTMKALALLAD	Homo sapiens
1961	189873	G Protein-Coupled Receptor GPR78	LR37	528	CSLRLPPEPERPRFAAFTAT	Homo sapiens
1962	189873	G Protein-Coupled Receptor GPR78	LR37	533	RGPLPPGICAHSAQGALRR	Homo sapiens
1963	189873	G Protein-Coupled Receptor GPR78	LR37	534	CRQAQARDLGAPWAVGLRSL	Homo sapiens
1964	189874	Neuromedin U Receptor 2	LR28	420	QQKLEDPFQKHLNSTEE	Homo sapiens
1965	189874	Neuromedin U Receptor 2	LR28	422	KDKSLEADEGNANIQRPC	Homo sapiens
1966	189874	Neuromedin U Receptor 2	LR28	423	SQHDPQLPPAQRNIFLTEC	Homo sapiens
1967	189874	Neuromedin U Receptor 2	LR28	487	ILHPFRAKLQSTRRALR	Homo sapiens
1968	189884	G Protein-Coupled Receptor Ls189884	LR27	415	CKKRGTKTNLRNQIRSK	Homo sapiens
1969	189884	G Protein-Coupled Receptor Ls189884	LR27	418	EKPSSPSSGKKGTEKAE	Homo sapiens
1970	189884	G Protein-Coupled Receptor Ls189884	LR27	419	PSVQDNDPIPWEHEHQETGE	Homo sapiens
1971	189884	G Protein-Coupled Receptor Ls189884	LR27	486	KKPPTVSESQETPAGNSEG	Homo sapiens
1972	189884	G Protein-Coupled Receptor Ls189884	LR27	1832	LVMSEEFREGKGVVWK	Homo sapiens
1973	189884	G Protein-Coupled Receptor Ls189884	LR27	1833	GLPDKVPSPESPAIPEK	Homo sapiens
1974	189884	G Protein-Coupled Receptor Ls189884	LR27	1834	PDVEQFWHERDTVPSVQ	Homo sapiens
1975	189884	G Protein-Coupled Receptor Ls189884	LR27	1835	RHHEGVEMCLVDVPAVAEE	Homo sapiens
1976	189895	G Protein-Coupled Receptor GPR61	AAK12637.1	1685	RVPQTGPGPSTASGVPE	Homo sapiens
1977	189895	G Protein-Coupled	AAK12637.1	1686	ETPRQRSESLSSRSTMVTS	Homo sapiens

1978	189895	Receptor GPR61	AAK12637.1	1687	SSGAPQTTPHRTFGGGK	Homo sapiens
1979	189895	G Protein-Coupled Receptor GPR61	AAK12637.1	1688	KPAPEEELRLPSREGSIEE	Homo sapiens
1980	189895	G Protein-Coupled Receptor GPR61	AAK12637.1	1689	CPSESWVSRPLSPKQE	Homo sapiens
1981	189900	Sphingolipid Receptor Edg8	LR1	312	TGKLRGARYQPGAGLRAD	Homo sapiens
1982	189900	Sphingolipid Receptor Edg8	LR1	316	ALERSLTMARRGAPVSS	Homo sapiens
1983	189900	Sphingolipid Receptor Edg8	LR1	317	DGSFSGSERSPPQRDGLD	Homo sapiens
1984	189900	Sphingolipid Receptor Edg8	LR1	318	CGRDPSSGSSQSSASAAEASG	Homo sapiens
1985	189901	G Protein-Coupled Receptor Ls189901	ENSP000000071589	2266	ASRKAEAGIKLVQGEVS	Homo sapiens
1986	189901	(HEOAD54) G Protein-Coupled Receptor Ls189901	ENSP000000071589	2270	SCLSYRVGTKPSASLR	Homo sapiens
1987	189901	G Protein-Coupled Receptor Ls189901	ENSP000000071589	2271	RVDYVILLHETWRFGAAC	Homo sapiens
1988	189901	G Protein-Coupled Receptor Ls189901	ENSP000000071589	2272	HQSRALLGLTRGRQGPVSD	Homo sapiens
1989	189901	G Protein-Coupled Receptor Ls189901	ENSP000000071589	2273	CIHTRPWTSNTVFLVSL	Homo sapiens
1990	189901	G Protein-Coupled Receptor Ls189901	ENSP000000071589	2274	RGRQGPVSDSSYQPSR	Homo sapiens
1991	189904	Purinergic Receptor P2U2 (GPR91)	AAK29080.1	2108	IDRYLIKYPFREHLLQKKE	Homo sapiens
1992	189904	Purinergic Receptor P2U2 (GPR91)	AAK29080.1	2109	TDNGTTCNDFASSGDPN	Homo sapiens
1993	189904	Purinergic Receptor P2U2 (GPR91)	AAK29080.1	2110	FLKQRNRQVATAIPL	Homo sapiens
1994	189904	Purinergic Receptor P2U2 (GPR91)	AAK29080.1	2111	RNVRIASRLGSWKYQC	Homo sapiens
1995	189904	Purinergic Receptor P2U2 (GPR91)	AAK29080.1	2112	GDHFRDMLMNLRLHNFKS	Homo sapiens

1996	189920	G Protein-Coupled Receptor GPR63 (PSP24 beta)	AAK12639.2	1721	CVAFLAVGNPDLQIPSR	Homo sapiens
1997	189920	G Protein-Coupled Receptor GPR63 (PSP24 beta)	AAK12639.2	1722	NTLRHNALRIHSYPEGIC	Homo sapiens
1998	189920	G Protein-Coupled Receptor GPR63 (PSP24 beta)	AAK12639.2	1723	QASKLGLMSLQRPFQMSID	Homo sapiens
1999	189920	G Protein-Coupled Receptor GPR63 (PSP24 beta)	AAK12639.2	1724	DMMPKSFKFLPQLPGHTKRR	Homo sapiens
2000	189945	G Protein-Coupled Receptor Dj287g14.2	Q9Y3K0	1715	QNLKDPVQIKIKHRTQE	Homo sapiens
2001	189945	G Protein-Coupled Receptor Dj287g14.2	Q9Y3K0	1716	KNKSGGWNTSGCVAHRD	Homo sapiens
2002	189945	G Protein-Coupled Receptor Dj287g14.2	Q9Y3K0	1717	RNNNEVVGKESYGKEKGDE	Homo sapiens
2003	189945	G Protein-Coupled Receptor Dj287g14.2	Q9Y3K0	1718	CGRNGKRSNRTLREEVLR	Homo sapiens
2004	189945	G Protein-Coupled Receptor Dj287g14.2	Q9Y3K0	1719	TSKSKSSTTVFKRNSHTD	Homo sapiens
2005	189945	G Protein-Coupled Receptor Dj287g14.2	Q9Y3K0	1720	DKSLSLAHADGDQTS	Homo sapiens
2006	190026	G Protein-Coupled Receptor JEG18	LR24	407	LFPLLRSDDTPGNRITKC	Homo sapiens
2007	190026	G Protein-Coupled Receptor JEG18	LR24	408	QDKYPMAQDLGEKQKALK	Homo sapiens
2008	190026	G Protein-Coupled Receptor JEG18	LR24	409	SFPLDFLVKSNEIKSC	Homo sapiens
2009	190026	G Protein-Coupled Receptor JEG18	LR24	410	RRRLSRQDLHDSIQLHAK	Homo sapiens
2010	190031	G Protein-Coupled Receptor VLGR1	AAD55586.1	1725	KGEAKLDSRAKDVLTIQE	Homo sapiens
2011	190031	G Protein-Coupled Receptor VLGR1	AAD55586.1	1727	DHKEQPIVTENAERQLVVKD	Homo sapiens
2012	190031	G Protein-Coupled Receptor VLGR1	AAD55586.1	1728	EDFEEQTLTLFLDGERERK	Homo sapiens
2013	190031	G Protein-Coupled	AAD55586.1	1729	EGKEGDYIRIPERLLDVQD	Homo sapiens

2014	190168	Receptor VLGR1	AAF27278.1	324	SEAYADGIEGYDILVACSSS	Homo sapiens
2015	190168	G Protein-Coupled Receptor GPR58	AAF27278.1	326	NNLRENQNNQVKKDKKAAK	Homo sapiens
2016	190168	G Protein-Coupled Receptor GPR58	AAF27278.1	379	DPFLNFSTPVVLFDAIT	Homo sapiens
2017	190168	G Protein-Coupled Receptor GPR58	AAF27278.1	380	GKIFSCFHNTILCMQKE	Homo sapiens
2018	190170	G Protein-Coupled Receptor GPR57	AAF27279.1	327	CPKFVNKILSSHQPLFS	Homo sapiens
2019	190170	G Protein-Coupled Receptor GPR57	AAF27279.1	328	KQHARVISHVPENTKGAVKK	Homo sapiens
2020	190170	G Protein-Coupled Receptor GPR57	AAF27279.1	329	ENTKGAVKKHLSKKKDRKA	Homo sapiens
2021	190170	G Protein-Coupled Receptor GPR57	AAF27279.1	330	CKFHTSFDMMRLTSI	Homo sapiens
2022	190188	G Protein-Coupled Receptor LGR6	LR36	439	ENHDQDLDLEQLEMEDSKP	Homo sapiens
2023	190188	G Protein-Coupled Receptor LGR6	LR36	440	NPHFRDDLRLRPRAGDS	Homo sapiens
2024	190188	G Protein-Coupled Receptor LGR6	LR36	442	EDLHLDDEESSKRPLGLLAR	Homo sapiens
2025	190188	G Protein-Coupled Receptor LGR6	LR36	621	DSGPLAYAAAGELEKSSC	Homo sapiens
2026	190414	G Protein-coupled Receptor GPR101	CAC33098.1	1836	CAARRQHALLYNVVKRHSLE	Homo sapiens
2027	190414	G Protein-coupled Receptor GPR101	CAC33098.1	1837	DGSLKAKEGSTGTSESV	Homo sapiens
2028	190414	G Protein-coupled Receptor GPR101	CAC33098.1	1838	CSIDLGEDGMEFGEDDIN	Homo sapiens
2029	190414	G Protein-coupled Receptor GPR101	CAC33098.1	1839	SEDDVEAVNIPESLPPS	Homo sapiens
2030	190414	G Protein-coupled Receptor GPR101	CAC33098.1	1840	MHKTIKKEIQDMLKKFFC	Homo sapiens
2031	190414	G Protein-coupled Receptor GPR101	CAC33098.1	1841	KEDSHDPLPGTEGGTEG	Homo sapiens
2032	190418	Inflammation-Related G Protein-Coupled Receptor	LR8	343	RQVKRAAQALDQYKLRQAS	Homo sapiens

2033	190418	EX33 Inflammation-Related G Protein-Coupled Receptor	LR8	344	RTDEAMPGRFQELDSRLASG	Homo sapiens
2034	190418	EX33 Inflammation-Related G Protein-Coupled Receptor	LR8	345	DSSEVGDDQINSKRAQMAEK	Homo sapiens
2035	190418	EX33 Inflammation-Related G Protein-Coupled Receptor	LR8	346	KAQPIKGARRAPDSSSEFGK	Homo sapiens
2036	190419	G Protein-Coupled Receptor Ls190419	CAC33085.1	2716	RRKSNFRLRGYSTGKT	Homo sapiens
2037	190419	G Protein-Coupled Receptor Ls190419	CAC33085.1	2717	RRQKSSYNVLLALAAAD	Homo sapiens
2038	190419	G Protein-Coupled Receptor Ls190419	CAC33085.1	2719	CFLTSPYYWWPNIWT	Homo sapiens
2039	190419	G Protein-Coupled Receptor Ls190419	CAC33085.1	2725	CSIFFILNSIIVYKLR	Homo sapiens
2040	190421	MrgX1 G Protein-Coupled Receptor	AAK91804.1	2754	GRUYLSLSFISIPH	Homo sapiens
2041	190421	MrgX1 G Protein-Coupled Receptor	AAK91804.1	2755	FFLFLWHVVDRE	Homo sapiens
2042	190421	MrgX1 G Protein-Coupled Receptor	AAK91804.1	2756	MDPTISTLDTELTP	Homo sapiens
2043	190427	Cysteinyl Leukotriene CYSLT2 Receptor	LR49	471	ASSIMLLDSGSEQNGSVTSC	Homo sapiens
2044	190427	Cysteinyl Leukotriene CYSLT2 Receptor	LR49	472	RVLLKVEVPESGLRVSHRK	Homo sapiens
2045	190427	Cysteinyl Leukotriene CYSLT2 Receptor	LR49	473	KDRLKSALRKGHHPQKATKC	Homo sapiens
2046	190427	Cysteinyl Leukotriene CYSLT2 Receptor	LR49	512	MEPNGTFSNNNSRNC	Homo sapiens
2047	190427	Cysteinyl Leukotriene CYSLT2 Receptor	NP_065110.1	2253	CTIENFKREFFPIWLJIF	Homo sapiens
2048	190427	Cysteinyl Leukotriene CYSLT2 Receptor	NP_065110.1	2254	GVLGNGLSIWFLQPYK	Homo sapiens
2049	190427	Cysteinyl Leukotriene CYSLT2 Receptor	NP_065110.1	2255	ADYYLRGSGNWIFGDLAC	Homo sapiens
2050	190427	Cysteinyl Leukotriene CYSLT2 Receptor	NP_065110.1	2256	FRLHVTIRS AWILC	Homo sapiens

2051	190427	Receptor Cysteinyl Leukotriene CysLT2	NP_065110.1	2257	CGIIWILIMASSIMLLDSGS	Homo sapiens
2052	190427	Receptor Cysteinyl Leukotriene CysLT2	NP_065110.1	2258	CLELNLYKIAKLQTMNYIAL	Homo sapiens
2053	190427	Receptor Cysteinyl Leukotriene CysLT2	NP_065110.1	2260	VSHRKALTTIIITLIIFLC	Homo sapiens
2054	190427	Receptor Cysteinyl Leukotriene CysLT2	NP_065110.1	2261	CFLPYHTLRTVHLTWKVGL	Homo sapiens
2055	190427	Receptor Cysteinyl Leukotriene CysLT2	NP_065110.1	2262	CKDRLHKALVITLALA	Homo sapiens
2056	190427	Receptor Cysteinyl Leukotriene CysLT2	NP_065110.1	2263	YFAGENFKDRLKSALRKG	Homo sapiens
2057	190427	Receptor Cysteinyl Leukotriene CysLT2	NP_065110.1	2264	HPQKAKTKCVFPVSVWLKE	Homo sapiens
2058	190437	Receptor G Protein-Coupled Receptor C5L2	LR31	429	DSVSVEYGDYSDLSDRPVDC	Homo sapiens
2059	190437	Receptor G Protein-Coupled Receptor C5L2	LR31	430	RESQGGQDESVDKSKTSHD	Homo sapiens
2060	190437	Receptor G Protein-Coupled Receptor C5L2	LR31	431	PSAIYRRLHQEHFARLQC	Homo sapiens
2061	190437	Receptor G Protein-Coupled Receptor C5L2	LR31	432	CHWALRESQGGQDESVDKKS	Homo sapiens
2062	190437	Receptor G Protein-Coupled Receptor C5L2	NP_060955.1	2818	MGNDSSVSVEYGDYSDLSDRPVDC	Homo sapiens
2063	190438	Receptor G Protein-Coupled Receptor Ls190438	ENSP00000080322	2585	TERLKIRWHTSDNQVRPQAC	Homo sapiens
2064	190484	Receptor G Protein-Coupled Receptor Ls190484	LR33	434	EADLGATGHRPRTLEDD	Homo sapiens
2065	190484	Receptor G Protein-Coupled Receptor Ls190484	LR33	435	RTCHRQQQPAACRGFARVAR	Homo sapiens
2066	190484	Receptor G Protein-Coupled Receptor Ls190484	LR33	436	EERPGSFTPEPQTQLDSEG	Homo sapiens
2067	190484	Receptor G Protein-Coupled Receptor Ls190484	LR33	437	RSDPTAQPLNPTAQPGSD	Homo sapiens
2068	190595	Receptor G Protein-Coupled Receptor SH120	NP_057418.1	1730	RNVTDIDLALERRLLQ	Homo sapiens
2069	190595	Receptor G Protein-Coupled Receptor SH120	NP_057418.1	1731	KKKRMAMARRTMFQKGE	Homo sapiens

2070	190595	G Protein-Coupled Receptor SH120	NP_057418.1	1732	KSVTTSASGSENILUQQE	Homo sapiens
2071	190595	G Protein-Coupled Receptor SH120	NP_057418.1	1733	EVDALFEELSRQLFLETAD	Homo sapiens
2072	190595	G Protein-Coupled Receptor SH120	NP_057418.1	1734	DRVGKTDPTVTRGIEIT	Homo sapiens
2073	190599	G Protein-Coupled Receptor GPRC5B	O75205	411	VRLPFIKEKEKKSPVGLH	Homo sapiens
2074	190599	G Protein-Coupled Receptor GPRC5B	O75205	412	DEHNAALRTAGFPNGSLGKR	Homo sapiens
2075	190599	G Protein-Coupled Receptor GPRC5B	O75205	413	GKRPSGSLGKRPSAPFRSNV	Homo sapiens
2076	190599	G Protein-Coupled Receptor GPRC5B	O75205	414	SQPRMRETAFEEDVQLPR	Homo sapiens
2077	190602	G Protein-Coupled Receptor GPCR150	CAB55314.1	542	GDPAINYQSLKAQNAVSRHC	Homo sapiens
2078	190602	G Protein-Coupled Receptor GPCR150	CAB55314.1	543	PFSSHSSVTYRSKKIFLSKL	Homo sapiens
2079	190602	G Protein-Coupled Receptor GPCR150	CAB55314.1	619	GKILLNIIILGMRRKNKTCQN	Homo sapiens
2080	190602	G Protein-Coupled Receptor GPCR150	CAB55314.1	620	EEVTILVQAIRITSYMNE	Homo sapiens
2081	190623	Melanopsin	AAF24978.1	2137	CKNGESLWQRQLQSE	Homo sapiens
2082	190623	Melanopsin	AAF24978.1	2138	RHSRPYPYSYRSTHRST	Homo sapiens
2083	190623	Melanopsin	AAF24978.1	2139	TSHTSNLSWISIRRRQE	Homo sapiens
2084	190623	Melanopsin	AAF24978.1	2140	DLEAKAPPRPQGHEAET	Homo sapiens
2085	190627	G Protein-Coupled Receptor GPR41 & GPR42	NP_005295.1	1735	KLQRPRVAVDVLLNLTASD	Homo sapiens
2086	190627	G Protein-Coupled Receptor GPR41 & GPR42	NP_005295.1	1736	KTRPRLGQAGLVSVAC	Homo sapiens
2087	190627	G Protein-Coupled Receptor GPR41 & GPR42	NP_005295.1	1737	EFSGDISHSQGTNGTC	Homo sapiens
2088	190627	G Protein-Coupled Receptor GPR41 & GPR42	NP_005295.1	1738	SRLVWILGRGGSHRRQRR	Homo sapiens
2089	190627	G Protein-Coupled Receptor GPR41 & GPR42	NP_005295.1	1739	GQWQQESSMELKEQKGG	Homo sapiens
2090	190627	G Protein-Coupled Receptor GPR41 & GPR42	NP_005295.1	1740	EEQRADRPAAERKTSEHSQGC	Homo sapiens
2091	190627	G Protein-Coupled Receptor GPR41 & GPR42	NP_005295.1	2569	MDTGPDQSYFSGNHWVFSV	Homo sapiens

2092	190701	Receptor GPR41 & GPR42 C-C Chemokine Receptor 11	AAF61299.1	1441	VAIYAYKKQRTKTDV	Homo sapiens
2093	190701	C-C Chemokine Receptor 11	AAF61299.1	1442	VAVTKVPSQSGVGKPCWII	Homo sapiens
2094	190701	C-C Chemokine Receptor 11	AAF61299.1	1443	CNMSKRMDIAIQVTESI	Homo sapiens
2095	190701	C-C Chemokine Receptor 11	AAF61299.1	1444	RQSVEEFFDSEGPTEP	Homo sapiens
2096	190705	G Protein-Coupled Receptor SALPR	NP_057652.1	1741	GHPPGSGGAESADTEARVR	Homo sapiens
2097	190705	G Protein-Coupled Receptor SALPR	NP_057652.1	1742	HSVASALKSHRTRGHGRGDC	Homo sapiens
2098	190705	G Protein-Coupled Receptor SALPR	NP_057652.1	1743	KGGAAVAGGRPTGASARR	Homo sapiens
2099	190705	G Protein-Coupled Receptor SALPR	NP_057652.1	1744	CLVRREFRKALKSLLWR	Homo sapiens
2100	190705	G Protein-Coupled Receptor SALPR	NP_057652.1	1745	RPFTATTKPEHEDQGLQ	Homo sapiens
2101	190711	G Protein-Coupled Receptor GPR85 (SREB2)	CAB82307.1	339	AFPPVLDVGTYSFIREEDQC	Homo sapiens
2102	190711	G Protein-Coupled Receptor GPR85 (SREB2)	CAB82307.1	340	HDRRKMKPVQFVAASQN	Homo sapiens
2103	190711	G Protein-Coupled Receptor GPR85 (SREB2)	CAB82307.1	341	RRRLVLDEFKMEKRISR	Homo sapiens
2104	190711	G Protein-Coupled Receptor GPR85 (SREB2)	CAB82307.1	342	LRRCFSTLLYCRKSRLPRE	Homo sapiens
2105	190725	G Protein-Coupled Receptor GPR26	LR26	554	PLTLAGVVARQPAGDRLC	Homo sapiens
2106	190725	G Protein-Coupled Receptor GPR26	LR26	555	CSRRPDERLRFVFTGA	Homo sapiens
2107	190725	G Protein-Coupled Receptor GPR26	LR26	557	CKEILNRLHRRSIHSSG	Homo sapiens
2108	190725	G Protein-Coupled Receptor GPR26	LR26	567	CLEEQKRRRQRATKIST	Homo sapiens
2109	190741	Sreb3	LR9	516	EPEEVSGALSPPSASAYVK	Homo sapiens
2110	190741	Sreb3	LR9	519	NGHAASRRLLGMDEVKGEK	Homo sapiens
2111	190741	Sreb3	LR9	526	KKCLRTHAPCWGTGGAPAPR	Homo sapiens
2112	190741	Sreb3	LR9	527	VLMAATHAVYGKLLFFEYR	Homo sapiens

2113	190742	G Protein-Coupled Receptor H7TBA62	LR23	550	RRAPGPPSDTFVFNALAD	Homo sapiens
2114	190742	G Protein-Coupled Receptor H7TBA62	LR23	551	QRRQRRRQDSRVVARSVR	Homo sapiens
2115	190742	G Protein-Coupled Receptor H7TBA62	LR23	552	RREPRQALAGTFRDLRSR	Homo sapiens
2116	190742	G Protein-Coupled Receptor H7TBA62	LR23	553	KQVGRRWVASNPRESRPS	Homo sapiens
2117	190743	G Protein-Coupled Receptor GPRC5D	LR32	568	KDCIESTGDYFLLCDAEGP	Homo sapiens
2118	190743	G Protein-Coupled Receptor GPRC5D	LR32	569	VENQELSRGTFLGDSGR	Homo sapiens
2119	190743	G Protein-Coupled Receptor GPRC5D	LR32	570	GDSGSREVLLQEKQEKNHHA	Homo sapiens
2120	190743	G Protein-Coupled Receptor GPRC5D	LR32	571	SMLLRGNPQFQRQPQWDDP	Homo sapiens
2121	190744	G Protein-Coupled Receptor GPRC5C	LR34	529	KVPEELTSSSHGPPPTAR	Homo sapiens
2122	190744	G Protein-Coupled Receptor GPRC5C	LR34	532	RSGEGGPGQGNSSAGWAV	Homo sapiens
2123	190744	G Protein-Coupled Receptor GPRC5C	LR34	535	QDTKKRSLLGTVFFLLGT	Homo sapiens
2124	190744	G Protein-Coupled Receptor GPRC5C	LR34	538	KEQKGQSMFVENKAFSMDE	Homo sapiens
2125	190745	G Protein-Coupled Receptor LGR7	LR40	560	TATEIRNQVKKEMILAKR	Homo sapiens
2126	190745	G Protein-Coupled Receptor LGR7	LR40	561	NYRQIRKSMDSKGQKTYAPS	Homo sapiens
2127	190745	G Protein-Coupled Receptor LGR7	LR40	565	SCSNLTVLVMRKKNKINHLN	Homo sapiens
2128	190745	G Protein-Coupled Receptor LGR7	LR40	566	DELDLGSNKIENLPPLIFKD	Homo sapiens
2129	190748	GPCR Ls190748	LR47	546	QLSSPSRPTQKTLCSLR	Homo sapiens
2130	190748	GPCR Ls190748	LR47	547	DMLKIASMHSGQIRKMEHAG	Homo sapiens
2131	190748	GPCR Ls190748	LR47	548	AGGYRSPRTSPDFKALRTVS	Homo sapiens
2132	190748	GPCR Ls190748	LR47	549	RESSCHIVTISSEFDG	Homo sapiens
2133	190748	GPCR Ls190748	LR47	1481	GVKKVLTSLFLLSARNC	Homo sapiens
2134	190748	GPCR Ls190748	LR47	1482	NSLLNPLIYAYWQKEVRLG	Homo sapiens
2135	190749	G Protein-Coupled	LR48	467	RRAALRPPRPARGSRURSD	Homo sapiens

2136	190749	Receptor GPR62	LR48	468	RPVRLALGRLRRALPGPVR	Homo sapiens
2137	190749	G Protein-Coupled Receptor GPR62	LR48	510	DSRLSLPLRPLPGGK	Homo sapiens
2138	190749	G Protein-Coupled Receptor GPR62	LR48	511	RPPEGPAVGPSEAEQTPE	Homo sapiens
2139	190749	G Protein-Coupled Receptor GPR62	LR48	2702	VVARRAALRPPRPA	Homo sapiens
2140	190749	G Protein-Coupled Receptor GPR62	LR48	2703	PSEAEQTPELAGGR	Homo sapiens
2141	190749	G Protein-Coupled Receptor GPR62	LR48	2704	GPSEAEQTPELAG	Homo sapiens
2142	190774	Histamine H4 Receptor	NP_067637.2	2235	PDNTINLSLSTRVTLAFF	Homo sapiens
2143	190774	Histamine H4 Receptor	NP_067637.2	2237	VVDKNLRHRSSYFFLN	Homo sapiens
2144	190774	Histamine H4 Receptor	NP_067637.2	2240	LYPHTLFEWDFGKEIC	Homo sapiens
2145	190774	Histamine H4 Receptor	NP_067637.2	2242	TQHTGVLVKIVLMVAV	Homo sapiens
2146	190774	Histamine H4 Receptor	NP_067637.2	2243	VNGPMILVSESWKDEGSEC	Homo sapiens
2147	190774	Histamine H4 Receptor	NP_067637.2	2244	CEPGFFSEWYLAITSFL	Homo sapiens
2148	190774	Histamine H4 Receptor	NP_067637.2	2245	AYFNMINIYWSLWKRDLHLSRC	Homo sapiens
2149	190774	Histamine H4 Receptor	NP_067637.2	2246	CGHSFRGRLSSRRSL	Homo sapiens
2150	190774	Histamine H4 Receptor	NP_067637.2	2247	IASKMGFSQSDDSVALLHQRE	Homo sapiens
2151	190774	Histamine H4 Receptor	NP_067637.2	2249	IVLSFYSSATGPKSVWYRIA	Homo sapiens
2152	190823	Formyl Peptide Receptor 1 (FPR1)	NP_002020.1	2085	IIRVTVPGKTGTAC	Homo sapiens
2153	190823	Formyl Peptide Receptor 1 (FPR1)	NP_002020.1	2086	SPWTNDPKERINVAVA	Homo sapiens
2154	190823	Formyl Peptide Receptor 1 (FPR1)	NP_002020.1	2087	RIRELLQGMVKEIGIAVD	Homo sapiens
2155	190823	Formyl Peptide Receptor 1 (FPR1)	NP_002020.1	2088	TQTSDTATNSTLPSAE	Homo sapiens
2156	190824	Formyl Peptide Receptor-like 2 (FPR2)	LR14	481	TEVPDSAQTSNTHITSAS	Homo sapiens
2157	190824	Formyl Peptide Receptor-like 2 (FPR2)	LR14	522	GDTAVERLNVFITMAKV	Homo sapiens
2158	190824	Formyl Peptide Receptor-like 2 (FPR2)	LR14	523	MSLAKRVMITGLWIFTI	Homo sapiens
2159	190824	Formyl Peptide Receptor-like 2 (FPR2)	LR14	525	LHFIFGTVPMISITV	Homo sapiens

like 2 (FPRL2)

2160	190948	EMR2 Hormone Receptor	NP_038475.1	1658	DELLEAPGDIETLRLQQHC	Homo sapiens
2161	190948	EMR2 Hormone Receptor	NP_038475.1	1659	CVASHLLDGLDVLRLSKN	Homo sapiens
2162	190948	EMR2 Hormone Receptor	NP_038475.1	1660	KSGDPGPSVAVGLVSPG	Homo sapiens
2163	190948	EMR2 Hormone Receptor	NP_038475.1	1661	SKGIRKLKTESEMIHTLSS	Homo sapiens
2164	190948	EMR2 Hormone Receptor	NP_038475.1	1662	ELSLEVQKQVDRSVTLRQNG	Homo sapiens
2165	190948	EMR2 Hormone Receptor	NP_038475.1	1663	EPEKQMLLHETHQGLLDGGS	Homo sapiens
2166	190955	Leukotriene B4 Receptor BLT1	NP_000743.1	1492	KRMQKRSVTALMVNLALAD	Homo sapiens
2167	190955	Leukotriene B4 Receptor BLT1	NP_000743.1	1493	RPFVSQKLRTKAMARR	Homo sapiens
2168	190955	Leukotriene B4 Receptor BLT1	NP_000743.1	1494	ASYSDIGRRRLQARRFR	Homo sapiens
2169	190955	Leukotriene B4 Receptor BLT1	NP_000743.1	1495	LEGTGSEASSTRRGGG	Homo sapiens
2170	191039	Trace Amine Receptor 1 (TA1)	LR122	2039	RKALKMMLFGKIFQKDSRC	Homo sapiens
2171	191039	Trace Amine Receptor 1 (TA1)	LR122	2040	QIGLEMKNGISQSKERKAV	Homo sapiens
2172	191039	Trace Amine Receptor 1 (TA1)	LR122	2041	RIYJAKEQARLUSDANQK	Homo sapiens
2173	191039	Trace Amine Receptor 1 (TA1)	LR122	2042	ELNFKGAEIYYKHVHC	Homo sapiens
2174	191039	Trace Amine Receptor 1 (TA1)	LR122	2043	CVKNNWSNDVRASLYS	Homo sapiens
2175	191132	G Protein-Coupled Receptor 88 (GPR88)	NP_071332.1	1569	SAEPPADWDGAGGSVRLRG	Homo sapiens
2176	191132	G Protein-Coupled Receptor 88 (GPR88)	NP_071332.1	1571	GIVRRVRVSVKRVSVLN	Homo sapiens
2177	191132	G Protein-Coupled Receptor 88 (GPR88)	NP_071332.1	1572	RNEEFRRSVRSVLPGVGDA	Homo sapiens
2178	191132	G Protein-Coupled Receptor 88 (GPR88)	NP_071332.1	1573	CEEEESWAGRRIPVSLLYSG	Homo sapiens
2179	191132	G Protein-Coupled Receptor 88 (GPR88)	NP_071332.1	1651	CYLGIVRRVRVSVKRVVS	Homo sapiens
2180	191168	P2Y12 Platelet ADP Receptor	NP_073625.1	1544	KELYRSYVTRTGVGKVPFR	Homo sapiens
2181	191168	P2Y12 Platelet ADP Receptor	NP_073625.1	1545	ILTNRQPRDNVKKCS	Homo sapiens

2182	191168	P2Y12 Platelet ADP Receptor	NP_073625.1	1546	CPNSATSLSQDNRRKKEQDGG	Homo sapiens
2183	191168	P2Y12 Platelet ADP Receptor	NP_073625.1	1570	TTRPFKTSNPKNLLGAK	Homo sapiens
2184	191193	Trace Amine Receptor 3 (TA3)	LR88	1969	ANEEGIEELVVA	Homo sapiens
2185	191193	Trace Amine Receptor 3 (TA3)	LR88	2316	RKIESTASQAQSS	Homo sapiens
2186	191193	Trace Amine Receptor 3 (TA3)	LR88	2571	LVDAVIDAYMFI	Homo sapiens
2187	191193	Trace Amine Receptor 3 (TA3)	LR88	2573	RTDSSTTNLFSEEVET	Homo sapiens
2188	191196	G Protein-Coupled Receptor GPR80	IP_13092	1864	NASDFPDYAAAFGNCTDE	Homo sapiens
2189	191196	G Protein-Coupled Receptor GPR80	IP_13092	1865	TFLTSTNRTNRSACLD	Homo sapiens
2190	191196	G Protein-Coupled Receptor GPR80	IP_13092	1866	TLTHGLQTDSCCLKQKARR	Homo sapiens
2191	191196	G Protein-Coupled Receptor GPR80	IP_13092	1867	RLSISCSIQIHEA	Homo sapiens
2192	191196	G Protein-Coupled Receptor GPR80	IP_13092	1868	QQAVCSTVRCKVSGNLE	Homo sapiens
2193	191218	MrgX2 G Protein-Coupled Receptor	AAK91805.1	2749	QDIAEVDHSEGCF	Homo sapiens
2194	191218	MrgX2 G Protein-Coupled Receptor	AAK91805.1	2750	RKQWRLLQQPILKLA	Homo sapiens
2195	191218	MrgX2 G Protein-Coupled Receptor	AAK91805.1	2751	CSISINFPSFFTVMTC	Homo sapiens
2196	191218	MrgX2 G Protein-Coupled Receptor	AAK91805.1	2752	QWFLWLWVKDSV	Homo sapiens
2197	191222	G Protein-Coupled Receptor Ls191222	ENSP00000199719	2575	AFLSDNTIEVRINRLKK	Homo sapiens
2198	191222	G Protein-Coupled Receptor Ls191222	ENSP00000199719	2576	QETKNEFRNLKQISKC	Homo sapiens
2199	191222	G Protein-Coupled Receptor Ls191222	ENSP00000199719	2577	CNNKTHWAPVRSTM	Homo sapiens
2200	191222	G Protein-Coupled Receptor Ls191222	ENSP00000199719	2581	TKMAEYDLQNDVFIIPD	Homo sapiens
2201	193511	EGF-Like Module-Containing	AAK15076.1	1665	CQDITSSKTEGRKELQKIV	Homo sapiens

2202	193511	Mucin-Like Receptor EMR3	EGF-Like Module-Containing	AAK15076.1	1666	RDVESKVLETALKDPEQK	Homo sapiens
2203	193511	Mucin-Like Receptor EMR3	EGF-Like Module-Containing	AAK15076.1	1667	KIQNDSVAIETQAITDNC	Homo sapiens
2204	193511	Mucin-Like Receptor EMR3	EGF-Like Module-Containing	AAK15076.1	1668	CSEERKTFNLNVQMNSMIDIR	Homo sapiens
2205	193511	Mucin-Like Receptor EMR3	EGF-Like Module-Containing	AAK15076.1	1669	EEMDKKQVYVNSQVVSAA	Homo sapiens
2206	193511	Mucin-Like Receptor EMR3	EGF-Like Module-Containing	AAK15076.1	1670	SKSVTLTFQHVKMTPSTK	Homo sapiens
2207	193516	Mucin-Like Receptor EMR3	G Protein-Coupled	CAC21687.1	2142	CLLLPTAVIVFSVVKIAK	Homo sapiens
2208	193516	Receptor dJ402H5.1	G Protein-Coupled	CAC21687.1	2144	RPDSIPIQLSVVPTLLA	Homo sapiens
2209	193516	Receptor dJ402H5.1	G Protein-Coupled	CAC21687.1	2145	CQTGGGLKATKKKSLEG	Homo sapiens
2210	193516	Receptor dJ402H5.1	G Protein-Coupled	CAC21687.1	2146	RLHTVTTVRKSSAVLE	Homo sapiens
2211	193516	Receptor dJ402H5.1	G Protein-Coupled	CAC21687.1	2620	PTAVIVFSVVKIAKV	Homo sapiens
2212	193524	Receptor dJ402H5.1	Cadherin EGF LAG Seven-Pass G-Type Receptor 3 (CELSR3)	NP_001398.1	1947	KLAQLRLREVGTGHTDHYFSQD	Homo sapiens
2213	193524	Cadherin EGF LAG Seven-Pass G-Type Receptor 3 (CELSR3)	Cadherin EGF LAG Seven-Pass G-Type Receptor 3 (CELSR3)	NP_001398.1	1948	CALQTWGSERRRLGLDTSKD	Homo sapiens
2214	193524	Cadherin EGF LAG Seven-Pass G-Type Receptor 3 (CELSR3)	Cadherin EGF LAG Seven-Pass G-Type Receptor 3 (CELSR3)	NP_001398.1	2734	RGRRRQSARNSRGPPEQPNE	Homo sapiens
2215	193524	Cadherin EGF LAG Seven-Pass G-Type Receptor 3 (CELSR3)	Cadherin EGF LAG Seven-Pass G-Type Receptor 3 (CELSR3)	NP_001398.1	2735	RNSRGPPEQPNEELG	Homo sapiens
2216	193524	Cadherin EGF LAG Seven-Pass G-Type Receptor 3 (CELSR3)	Cadherin EGF LAG Seven-Pass G-Type Receptor 3 (CELSR3)	NP_001398.1	2736	AQVREDVRPHTVWLR	Homo sapiens
2217	193524	Cadherin EGF LAG Seven-Pass G-Type Receptor 3 (CELSR3)	Cadherin EGF LAG Seven-Pass G-Type Receptor 3 (CELSR3)	NP_001398.1	2742	QLDQVPSRHPSPRE	Homo sapiens

2218	193524	Cadherin EGF LAG Seven-Pass G-Type Receptor 3 (CELSR3)	NP_001398.1	2744	LDLSRSSNSREQLDQV	Homo sapiens
2219	193914	Neuropeptide FF 1 Receptor	NP_071429.1	1903	REEHFMVDARNRSPLYSC	Homo sapiens
2220	193914	Neuropeptide FF 1 Receptor	NP_071429.1	1904	PGPAPGGEEAADPRASRR	Homo sapiens
2221	193914	Neuropeptide FF 1 Receptor	NP_071429.1	1905	CPRPSGSHKEAYSERPGGL	Homo sapiens
2222	193914	Neuropeptide FF 1 Receptor	NP_071429.1	1906	PSSGAPRPGRLPLRNGRVA	Homo sapiens
2223	194319	G Protein-Coupled Receptor FLJ22684	NP_079324.1	2018	FLGKNDIDIKTKELIVN	Homo sapiens
2224	194319	G Protein-Coupled Receptor FLJ22684	NP_079324.1	2019	QVTYRDSKEKRDLRNFLK	Homo sapiens
2225	194319	G Protein-Coupled Receptor FLJ22684	NP_079324.1	2020	CERTKIWGTFKINERFTND	Homo sapiens
2226	194319	G Protein-Coupled Receptor FLJ22684	NP_079324.1	2021	SKYANGIEIQLKKAYER	Homo sapiens
2227	194431	Olfactory Receptor, Family 51, Subfamily E, Member 2	NP_110401.1	2022	CIVVFIVRTERSLHAP	Homo sapiens
2228	194431	Olfactory Receptor, Family 51, Subfamily E, Member 2	NP_110401.1	2023	KILALFWFDSREISFEAC	Homo sapiens
2229	194431	Olfactory Receptor, Family 51, Subfamily E, Member 2	NP_110401.1	2024	CVHQDVMKLAAYADTLP	Homo sapiens
2230	194431	Olfactory Receptor, Family 51, Subfamily E, Member 2	NP_110401.1	2027	RFGNSLHPVVRVVMGD	Homo sapiens
2231	194431	Olfactory Receptor, Family 51, Subfamily E, Member 2	NP_110401.1	2028	KTKQIRTRVLAMFKISC	Homo sapiens
2232	194743	FLJ14454	LR77	1855	KTDENEQDSASVDMVFSP	Homo sapiens
2233	194743	FLJ14454	LR77	1856	KKDYQYPKSLDILSNVGC	Homo sapiens
2234	194743	FLJ14454	LR77	1857	KNLQTSDDGINNIDFDNN	Homo sapiens
2235	194743	FLJ14454	LR77	1858	SQNGNNPQWELDYRQEKIC	Homo sapiens
2236	194743	FLJ14454	LR77	1859	RPRLRVKMYNFLRSLPTLHE	Homo sapiens
2237	194745	G Protein-Coupled Receptor SLT/MCH2	AAK32193.1	1845	CNPSVPKQVRVMKLTGM	Homo sapiens
2238	194745	G Protein-Coupled Receptor SLT/MCH2	AAK32193.1	1846	RLTRWRTRYKTIRINLG	Homo sapiens
2239	194745	G Protein-Coupled Receptor SLT/MCH2	AAK32193.1	1847	KDGVESCAFDLTSPDDVL	Homo sapiens
2240	194745	G Protein-Coupled Receptor SLT/MCH2	AAK32193.1	1848	LSGNFQKRLPQIQRRATE	Homo sapiens

2241	194745	G Protein-Coupled Receptor SLI/MCH2	AAK32193.1	1849	TIIRSRKKTVPDIYC	Homo sapiens
2242	194745	G Protein-Coupled Receptor SLI/MCH2	AAK32193.1	1907	RRATEKEINNMGNTLKSHF	Homo sapiens
2243	194756	Chemokine Receptor FKS80/GPR81	AAK29071.1	2089	CRIEGDTISQVMPPLIVA	Homo sapiens
2244	194756	Chemokine Receptor FKS80/GPR81	AAK29071.1	2090	RRHWAFGDIPCRVGLFTL	Homo sapiens
2245	194756	Chemokine Receptor FKS80/GPR81	AAK29071.1	2091	CESFIMESANGWHDIM	Homo sapiens
2246	194756	Chemokine Receptor FKS80/GPR81	AAK29071.1	2092	CSFKIVWSLRRRQLARQAR	Homo sapiens
2247	194756	Chemokine Receptor FKS80/GPR81	AAK29071.1	2093	RRRQQLARQARMKKATR	Homo sapiens
2248	194756	Chemokine Receptor FKS80/GPR81	AAK29071.1	2094	TVPSACDPSVHGALH	Homo sapiens
2249	194756	Chemokine Receptor FKS80/GPR81	AAK29071.1	2095	CSLKPQPGHSGTKRPEEM	Homo sapiens
2250	194756	Chemokine Receptor FKS80/GPR81	AAK29071.1	2096	CISVANSEFSQSDGQWD	Homo sapiens
2251	194757	G Protein-Coupled Receptor Ls194757	CAB82385.1	2034	RTRKQHSSEATSSNRVFFVC	Homo sapiens
2252	194757	G Protein-Coupled Receptor Ls194757	CAB82385.1	2035	RVISQISADNYKIHGDPSA	Homo sapiens
2253	194757	G Protein-Coupled Receptor Ls194757	CAB82385.1	2036	TSSARTSNAKPFHSD	Homo sapiens
2254	194757	G Protein-Coupled Receptor Ls194757	CAB82385.1	2037	NGTRPGMASTKLSPWD	Homo sapiens
2255	194858	G Protein-Coupled Receptor LS194858	LR84	1933	LGIAWDRRLRSPAGC	Homo sapiens
2256	194858	G Protein-Coupled Receptor LS194858	LR84	1934	GERYMAVLRPLQPPGS	Homo sapiens
2257	194858	G Protein-Coupled Receptor LS194858	LR84	1935	CRDEPSALARALTWRQAR	Homo sapiens
2258	194858	G Protein-Coupled Receptor LS194858	LR84	1936	AAQRCLQGLWGRASRD	Homo sapiens
2259	194858	G Protein-Coupled Receptor LS194858	LR84	1937	RDSPGPSIAVHPSSQSSVD	Homo sapiens
2260	194878	MrgX3 G Protein-Coupled	AAK91806.1	2748	ALFSRIHLDWKVLF	Homo sapiens

2261	194903	Receptor G Protein-Coupled Receptor GPCR _{B3}	ENSP00000198236	1991	CIAFKDIMPFSAQVGDER	Homo sapiens
2262	194903	G Protein-Coupled Receptor GPCR _{B3}	ENSP00000198236	1992	KAEEAYARADKKAPRPC	Homo sapiens
2263	194903	G Protein-Coupled Receptor GPCR _{B3}	ENSP00000198236	1993	ETKIQWHGKDNQVPKSV	Homo sapiens
2264	194903	G Protein-Coupled Receptor GPCR _{B3}	ENSP00000198236	1994	CSYLGKDLPENYNK	Homo sapiens
2265	194904	WO0034334-hFB41A	LR114	2011	SDYDMLDEDEEDVTNS	Homo sapiens
2266	194904	WO0034334-hFB41A	LR114	2014	NPHGAHATSPFNFSY	Homo sapiens
2267	194905	G Protein-Coupled Receptor MGC7035	LR112	1986	ERALPRTYMASVYNTRHVC	Homo sapiens
2268	194905	G Protein-Coupled Receptor MGC7035	LR112	1987	CAKMQNAEADATLVF	Homo sapiens
2269	194905	G Protein-Coupled Receptor MGC7035	LR112	1988	DRDTGRLEPSAHLRLVATVC	Homo sapiens
2270	194905	G Protein-Coupled Receptor MGC7035	LR112	1989	RYMNGSFPSKLRLMKKLPC	Homo sapiens
2271	194907	G Protein-Coupled Receptor 14273	LR116	2003	CARAAGDAPLRSLEQANRTR	Homo sapiens
2272	194907	G Protein-Coupled Receptor 14273	LR116	2004	VISYSKILQTTKASRKRL	Homo sapiens
2273	194907	G Protein-Coupled Receptor 14273	LR116	2005	TVSLAYSRSHQIRVSQQD	Homo sapiens
2274	194907	G Protein-Coupled Receptor 14273	LR116	2006	CTWFPEKGAILDTSVKNRD	Homo sapiens
2275	194908	G Protein-coupled Receptor Gpcrb4	LR117	2007	TYGRDNGQLLGERVARRDIC	Homo sapiens
2276	194908	G Protein-coupled Receptor Gpcrb4	LR117	2008	QETLPTLQPNQNMTEERQR	Homo sapiens
2277	194908	G Protein-coupled Receptor Gpcrb4	LR117	2009	RTSQSYTCNQECDNCLNAT	Homo sapiens
2278	194908	G Protein-coupled Receptor Gpcrb4	LR117	2010	RPQSHPRTPDDPKITVSC	Homo sapiens
2279	194957	Trace Amine Receptor 4 (TA4)	AAK71243.1	2312	VARRQAKKIENTGSKT	Homo sapiens
2280	194957	Trace Amine Receptor 4 (TA4)	AAK71243.1	2313	KVIVTGQVLKNSSA	Homo sapiens

2281	194957	Trace Amine Receptor 4 (TA4)	AAK71243.1	2318	MSSNSLLVAVQLC	Homo sapiens
2282	194958	Trace Amine Receptor 5 (TA5)	AAK71244.1	2307	IAKQAIKIETSSKV	Homo sapiens
2283	194958	Trace Amine Receptor 5 (TA5)	AAK71244.1	2314	MTSNFSQPVVQLC	Homo sapiens
2284	194958	Trace Amine Receptor 5 (TA5)	AAK71244.1	2319	KULSGDVLKAS	Homo sapiens
2285	194958	Trace Amine Receptor 5 (TA5)	AAK71244.1	2570	SGDVLKASSTISLFLE	Homo sapiens
2286	194989	MrgX4 G Protein-Coupled Receptor	AAK91807.1	2727	QDKPEVDKGGGQLPEESL	Homo sapiens
2287	194989	MrgX4 G Protein-Coupled Receptor	AAK91807.1	2728	LINISHURKILVS	Homo sapiens
2288	194989	MrgX4 G Protein-Coupled Receptor	AAK91807.1	2729	MDPTVPVFGTKL	Homo sapiens
2289	195015	G Protein-Coupled Receptor GPR82	AAL26482	2706	RYATLMQKDSQETT	Homo sapiens
2290	195015	G Protein-Coupled Receptor GPR82	AAL26482	2707	KIFYGHLLKKFRQPNF	Homo sapiens
2291	195015	G Protein-Coupled Receptor GPR82	AAL26482	2708	YSVIEATEGEESLC	Homo sapiens
2292	195015	G Protein-Coupled Receptor GPR82	AAL26482	2715	CTSIMEKDLTVSSVKR	Homo sapiens

SEQ ID NO:	LS_ID	Gene	Antibody Company Name
1	127	5-HT1A Receptor	Chemicon
1	127	5-HT1A Receptor	Research Diagnostics
1	127	5-HT1A Receptor	Santa Cruz
3	128	5-HT1B Receptor	Chemicon
3	128	5-HT1B Receptor	Research Diagnostics
3	128	5-HT1B Receptor	Santa Cruz
5	129	5-HT1D Receptor	Research Diagnostics
5	129	5-HT1D Receptor	Santa Cruz
11	132	5-HT2A Receptor	Calbiochem
11	132	5-HT2A Receptor	Research Diagnostics
13	133	5-HT2B Receptor	Research Diagnostics
15	134	5-HT2C Receptor	Research Diagnostics
15	134	5-HT2C Receptor	Santa Cruz
21	139	5-HT7 Receptor	Calbiochem
23	272	Adenosine A1 Receptor	Alpha Diagnostic Int.
23	272	Adenosine A1 Receptor	Calbiochem
23	272	Adenosine A1 Receptor	Santa Cruz
25	273	Adenosine A2a Receptor	Alpha Diagnostic Int.
25	273	Adenosine A2a Receptor	Calbiochem
25	273	Adenosine A2a Receptor	Chemicon
25	273	Adenosine A2a Receptor	Santa Cruz
27	274	Adenosine A2b Receptor	Alpha Diagnostic Int.
27	274	Adenosine A2b Receptor	Chemicon
27	274	Adenosine A2b Receptor	Santa Cruz
29	275	Adenosine A3 Receptor	Alpha Diagnostic Int.
29	275	Adenosine A3 Receptor	Santa Cruz
31	309	Melanocortin 2 Receptor (adrenocorticotrophic hormone) (MC2R)	Alpha Diagnostic Int.
31	309	Melanocortin 2 Receptor (adrenocorticotrophic hormone) (MC2R)	Chemicon
31	309	Melanocortin 2 Receptor (adrenocorticotrophic hormone) (MC2R)	Research Diagnostics
31	309	Melanocortin 2 Receptor (adrenocorticotrophic hormone) (MC2R)	Santa Cruz
35	377	Alpha 1b-adrenoceptor	Research Diagnostics
35	377	Alpha 1b-adrenoceptor	Santa Cruz
37	379	Alpha 1c-adrenoceptor	Research Diagnostics
37	379	Alpha 1c-adrenoceptor	Santa Cruz
39	387	Alpha 2a-adrenoceptor	Calbiochem
39	387	Alpha 2a-adrenoceptor	Santa Cruz
41	388	Alpha 2b-adrenoceptor	Research Diagnostics
41	388	Alpha 2b-adrenoceptor	Santa Cruz
43	389	Alpha 2c-adrenoceptor	Research Diagnostics
43	389	Alpha 2c-adrenoceptor	Santa Cruz
45	599	Bradykinin B1 Receptor	Research Diagnostics
49	635	Beta-1 adrenoceptor	Calbiochem
49	635	Beta-1 adrenoceptor	Research Diagnostics

49	635	Beta-1 adrenoceptor	Santa Cruz
51	640	Beta-2 adrenoceptor	Research Diagnostics
51	640	Beta-2 adrenoceptor	Santa Cruz
53	643	Beta-3 adrenoceptor	Alpha Diagnostic Int.
53	643	Beta-3 adrenoceptor	Chemicon
53	643	Beta-3 adrenoceptor	Research Diagnostics
53	643	Beta-3 adrenoceptor	Santa Cruz
57	692	Bombesin Receptor Subtype-3	Alpha Diagnostic Int.
57	692	Bombesin Receptor Subtype-3	Chemicon
59	729	CXC Chemokine Receptor 5	Research Diagnostics
59	729	CXC Chemokine Receptor 5	Santa Cruz
61	735	C-C Chemokine Receptor 1	Calbiochem
61	735	C-C Chemokine Receptor 1	Capralogics
61	735	C-C Chemokine Receptor 1	Chemicon
61	735	C-C Chemokine Receptor 1	Research Diagnostics
61	735	C-C Chemokine Receptor 1	Santa Cruz
63	737	C-C Chemokine Receptor 3	Research Diagnostics
63	737	C-C Chemokine Receptor 3	Santa Cruz
65	738	C-C Chemokine Receptor 4	Capralogics
65	738	C-C Chemokine Receptor 4	Research Diagnostics
65	738	C-C Chemokine Receptor 4	Santa Cruz
67	741	C-C Chemokine Receptor 7	Research Diagnostics
67	741	C-C Chemokine Receptor 7	Santa Cruz
69	742	C-C Chemokine Receptor 8	Chemicon
70	742	C-C Chemokine Receptor 8	Chemicon
71	742	C-C Chemokine Receptor 8	Chemicon
73	752	CXC Chemokine Receptor 3	Research Diagnostics
73	752	CXC Chemokine Receptor 3	Santa Cruz
73	752	CXC Chemokine Receptor 3	Zymed
75	753	CXC Chemokine Receptor 4	Biosource
75	753	CXC Chemokine Receptor 4	Calbiochem
75	753	CXC Chemokine Receptor 4	Capralogics
75	753	CXC Chemokine Receptor 4	Chemicon
75	753	CXC Chemokine Receptor 4	eBioscience
75	753	CXC Chemokine Receptor 4	Research Diagnostics
75	753	CXC Chemokine Receptor 4	Santa Cruz
77	755	Complement Component 3a Receptor 1	Chemokine.com
79	758	Complement Component 5a Receptor 1	Santa Cruz
83	832	Cannabinoid Receptor 1	Alpha Diagnostic Int.
83	832	Cannabinoid Receptor 1	Biosource
83	832	Cannabinoid Receptor 1	Calbiochem
83	832	Cannabinoid Receptor 1	Cayman
83	832	Cannabinoid Receptor 1	Chemicon
83	832	Cannabinoid Receptor 1	Santa Cruz
85	833	Cannabinoid Receptor 2	Alpha Diagnostic Int.
85	833	Cannabinoid Receptor 2	Calbiochem
85	833	Cannabinoid Receptor 2	Cayman
85	833	Cannabinoid Receptor 2	Chemicon
85	833	Cannabinoid Receptor 2	Santa Cruz
97	1240	Dopamine Receptor D1	Alpha Diagnostic Int.
97	1240	Dopamine Receptor D1	Biogenesis

97	1240	Dopamine Receptor D1	Calbiochem
97	1240	Dopamine Receptor D1	Chemicon
97	1240	Dopamine Receptor D1	FabGennix through Abcam
97	1240	Dopamine Receptor D1	Research Diagnostics
97	1240	Dopamine Receptor D1	Santa Cruz
99	1241	Dopamine Receptor D5	Alpha Diagnostic Int.
99	1241	Dopamine Receptor D5	Biogenesis
99	1241	Dopamine Receptor D5	Calbiochem
99	1241	Dopamine Receptor D5	Chemicon
99	1241	Dopamine Receptor D5	Santa Cruz
101	1242	Dopamine Receptor D2	Alpha Diagnostic Int.
101	1242	Dopamine Receptor D2	Biogenesis
101	1242	Dopamine Receptor D2	Calbiochem
101	1242	Dopamine Receptor D2	Chemicon
101	1242	Dopamine Receptor D2	DPC Biermann/Acris
101	1242	Dopamine Receptor D2	FabGennix through Abcam
101	1242	Dopamine Receptor D2	Research Diagnostics
101	1242	Dopamine Receptor D2	Santa Cruz
103	1243	Dopamine Receptor D3	Alpha Diagnostic Int.
103	1243	Dopamine Receptor D3	Biogenesis
103	1243	Dopamine Receptor D3	Calbiochem
103	1243	Dopamine Receptor D3	Chemicon
103	1243	Dopamine Receptor D3	Research Diagnostics
103	1243	Dopamine Receptor D3	Santa Cruz
103	1243	Dopamine Receptor D3	Zymed
105	1244	Dopamine Receptor D4	Alpha Diagnostic Int.
105	1244	Dopamine Receptor D4	Biogenesis
105	1244	Dopamine Receptor D4	Calbiochem
105	1244	Dopamine Receptor D4	Chemicon
105	1244	Dopamine Receptor D4	DPC Biermann/Acris
105	1244	Dopamine Receptor D4	Santa Cruz
107	1267	Opioid Receptor, delta 1 (OPRD1)	Biosource
107	1267	Opioid Receptor, delta 1 (OPRD1)	Calbiochem
107	1267	Opioid Receptor, delta 1 (OPRD1)	DPC Biermann/Acris
107	1267	Opioid Receptor, delta 1 (OPRD1)	Santa Cruz
113	1486	Endothelin B Receptor	Biogenesis
113	1486	Endothelin B Receptor	Capralogics
113	1486	Endothelin B Receptor	DPC Biermann/Acris
113	1486	Endothelin B Receptor	Fitzgerald Industries Int.
113	1486	Endothelin B Receptor	Research Diagnostics
115	1488	Endothelin A Receptor	Biogenesis
115	1488	Endothelin A Receptor	Capralogics
115	1488	Endothelin A Receptor	DPC Biermann/Acris
115	1488	Endothelin A Receptor	Fitzgerald Industries Int.
115	1488	Endothelin A Receptor	Research Diagnostics
117	1598	Calcium-Sensing Receptor (CASR)	Chemicon
117	1598	Calcium-Sensing Receptor (CASR)	DPC Biermann/Acris

121	1681	Follicle Stimulating Hormone Receptor	Biogenesis
121	1681	Follicle Stimulating Hormone Receptor	DPC Biermann/Acris
121	1681	Follicle Stimulating Hormone Receptor	Santa Cruz
125	1762	Galanin Receptor GalR1	Alpha Diagnostic Int.
135	1925	Gonadotropin-Releasing Hormone Receptor	Biocarta
135	1925	Gonadotropin-Releasing Hormone Receptor	Lab Vision Corporation/NeoMarkers
135	1925	Gonadotropin-Releasing Hormone Receptor	Research Diagnostics
135	1925	Gonadotropin-Releasing Hormone Receptor	Santa Cruz
139	1951	Growth Hormone Secretagogue Receptor	Santa Cruz
143	2120	Histamine H1 Receptor	Alpha Diagnostic Int.
143	2120	Histamine H1 Receptor	Chemicon
145	2121	Histamine H2 Receptor	Alpha Diagnostic Int.
145	2121	Histamine H2 Receptor	Chemicon
147	2783	Opioid Receptor, kappa 1 (OPRK1)	Biosource
147	2783	Opioid Receptor, kappa 1 (OPRK1)	Calbiochem
147	2783	Opioid Receptor, kappa 1 (OPRK1)	DPC Biermann/Acris
147	2783	Opioid Receptor, kappa 1 (OPRK1)	Santa Cruz
151	2976	Lysophosphatidic Acid Receptor Edg2	Exalpha Biologicals
155	3057	Melanocortin 3 Receptor (MC3R)	Alpha Diagnostic Int.
155	3057	Melanocortin 3 Receptor (MC3R)	Chemicon
155	3057	Melanocortin 3 Receptor (MC3R)	Research Diagnostics
155	3057	Melanocortin 3 Receptor (MC3R)	Santa Cruz
157	3058	Melanocortin 4 Receptor (MC4R)	Alpha Diagnostic Int.
157	3058	Melanocortin 4 Receptor (MC4R)	Chemicon
157	3058	Melanocortin 4 Receptor (MC4R)	Research Diagnostics
157	3058	Melanocortin 4 Receptor (MC4R)	Santa Cruz
159	3059	Melanocortin 5 Receptor (MC5R)	Alpha Diagnostic Int.
159	3059	Melanocortin 5 Receptor (MC5R)	Chemicon
159	3059	Melanocortin 5 Receptor (MC5R)	Research Diagnostics

159	3059	Melanocortin 5 Receptor (MC5R)	Santa Cruz
161	3061	Melanocortin 1 Receptor (MC1R)	Alpha Diagnostic Int.
161	3061	Melanocortin 1 Receptor (MC1R)	Chemicon
161	3061	Melanocortin 1 Receptor (MC1R)	Research Diagnostics
161	3061	Melanocortin 1 Receptor (MC1R)	Santa Cruz
169	3093	Metabotropic Glutamate Receptor 1	Chemicon
171	3094	Metabotropic Glutamate Receptor 2	Chemicon
173	3095	Metabotropic Glutamate Receptor 3	Chemicon
175	3096	Metabotropic Glutamate Receptor 4	Zymed
177	3097	Metabotropic Glutamate Receptor 5	Chemicon
183	3100	Metabotropic Glutamate Receptor 8	Chemicon
185	3212	Opioid mu-type Receptor	Biosource
185	3212	Opioid mu-type Receptor	Calbiochem
185	3212	Opioid mu-type Receptor	Chemicon
185	3212	Opioid mu-type Receptor	DPC Biermann/Acris
185	3212	Opioid mu-type Receptor	Santa Cruz
187	3223	Muscarinic acetylcholine Receptor M1	Biogenesis
187	3223	Muscarinic acetylcholine Receptor M1	Calbiochem
187	3223	Muscarinic acetylcholine Receptor M1	Chemicon
187	3223	Muscarinic acetylcholine Receptor M1	Santa Cruz
189	3224	Muscarinic acetylcholine Receptor M2	Biogenesis
189	3224	Muscarinic acetylcholine Receptor M2	Calbiochem
189	3224	Muscarinic acetylcholine Receptor M2	Chemicon
189	3224	Muscarinic acetylcholine Receptor M2	Santa Cruz
191	3226	Muscarinic acetylcholine Receptor M4	Biogenesis
192	3226	Muscarinic acetylcholine Receptor M4	Biogenesis
191	3226	Muscarinic acetylcholine Receptor M4	Chemicon
192	3226	Muscarinic acetylcholine Receptor M4	Chemicon
191	3226	Muscarinic acetylcholine Receptor M4	Santa Cruz

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192	3226	Muscarinic acetylcholine Receptor M4	Santa Cruz
194	3227	Muscarinic Acetylcholine Receptor M5	Biogenesis
194	3227	Muscarinic Acetylcholine Receptor M5	Santa Cruz
200	3404	Neuropeptide Y Receptor Type 2	Biogenesis
202	3405	Neuropeptide Y Receptor Type 4	Biogenesis
206	3408	Neurotensin Receptor Type 1	Santa Cruz
208	3452	Opiate Receptor-Like 1 (OPRL1)	Santa Cruz
214	3582	Oxytocin Receptor	Santa Cruz
216	3589	Purinergic Receptor P2Y, G- protein coupled, 2 (P2RY2)	Chemicon
216	3589	Purinergic Receptor P2Y, G- protein coupled, 2 (P2RY2)	Zymed
218	3595	Purinergic Receptor P2Y1	Chemicon
218	3595	Purinergic Receptor P2Y1	Zymed
228	3640	Parathyroid Hormone Receptor 1 (PTHr1)	Biocarta
228	3640	Parathyroid Hormone Receptor 1 (PTHr1)	Lab Vision Corporation/NeoMarkers
228	3640	Parathyroid Hormone Receptor 1 (PTHr1)	Santa Cruz
236	3846	Sphingolipid Receptor Edg1	Exalpha Biologicals
238	3847	Sphingolipid Receptor Edg3	Exalpha Biologicals
240	3848	C-C Chemokine Receptor 9	Research Diagnostics
248	3852	CX3C Chemokine Fractalkine Receptor 1	Chemicon
248	3852	CX3C Chemokine Fractalkine Receptor 1	Chemokine.com
248	3852	CX3C Chemokine Fractalkine Receptor 1	eBioscience
250	3853	G Protein-Coupled Receptor GPR15	Santa Cruz
264	3860	G Protein-Coupled Receptor SLC/MCH1	Alpha Diagnostic Int.
264	3860	G Protein-Coupled Receptor SLC/MCH1	Santa Cruz
295	3927	Prostaglandin E Receptor EP4	Cayman
299	4051	Proteinase-Activated Receptor 2	Research Diagnostics
299	4051	Proteinase-Activated Receptor 2	Santa Cruz
301	4052	Proteinase-Activated Receptor 3	Research Diagnostics
301	4052	Proteinase-Activated Receptor 3	Santa Cruz
305	4254	Rhodopsin	Biocarta
305	4254	Rhodopsin	DPC Biermann/Acris
311	4480	Somatostatin Receptor Type 1	Santa Cruz

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313	4481	Somatostatin Receptor Type 2	Biogenesis
313	4481	Somatostatin Receptor Type 2	Santa Cruz
315	4482	Somatostatin Receptor Type 3	Santa Cruz
317	4483	Somatostatin Receptor Type 4	Santa Cruz
319	4484	Somatostatin Receptor Type 5	Santa Cruz
321	4552	Tachykinin Receptor 1	Santa Cruz
323	4687	Thrombin Receptor	DPC Biermann/Acris
323	4687	Thrombin Receptor	Research Diagnostics
323	4687	Thrombin Receptor	Santa Cruz
325	4734	Thyrotropin Releasing Hormone Receptor	Santa Cruz
327	4944	Angiotensin II Type 1 Receptor	Alpha Diagnostic Int.
327	4944	Angiotensin II Type 1 Receptor	Biocarta
327	4944	Angiotensin II Type 1 Receptor	Biogenesis
327	4944	Angiotensin II Type 1 Receptor	Capralogics
327	4944	Angiotensin II Type 1 Receptor	Chemicon
327	4944	Angiotensin II Type 1 Receptor	DPC Biermann/Acris
327	4944	Angiotensin II Type 1 Receptor	Fitzgerald Industries Int.
327	4944	Angiotensin II Type 1 Receptor	Fitzgerald Industries Int.
327	4944	Angiotensin II Type 1 Receptor	Lab Vision Corporation/NeoMarkers
327	4944	Angiotensin II Type 1 Receptor	Santa Cruz
329	4946	Angiotensin II Type 2 Receptor	Alpha Diagnostic Int.
329	4946	Angiotensin II Type 2 Receptor	DPC Biermann/Acris
329	4946	Angiotensin II Type 2 Receptor	Santa Cruz
331	5072	Pyrimidinergic Receptor P2Y4	Chemicon
333	5117	Vasopressin V1A Receptor	Chemicon
335	5118	Vasopressin V1B Receptor	Alpha Diagnostic Int.
335	5118	Vasopressin V1B Receptor	Chemicon
337	5119	Vasopressin V2 Receptor	Alpha Diagnostic Int.
337	5119	Vasopressin V2 Receptor	Chemicon
337	5119	Vasopressin V2 Receptor	Research Diagnostics
347	6031	SIV/HIV Receptor BONZO	Santa Cruz
349	6204	Lysophosphatidic Acid Receptor Edg4	Exalpha Biologicals
351	6213	C-C Chemokine Receptor 5	Calbiochem
351	6213	C-C Chemokine Receptor 5	Capralogics
351	6213	C-C Chemokine Receptor 5	Chemicon
351	6213	C-C Chemokine Receptor 5	Research Diagnostics
351	6213	C-C Chemokine Receptor 5	Santa Cruz
361	6853	Purinergic Receptor P2Y11	Zymed

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365	7221	Galanin Receptor GalR2	Alpha Diagnostic Int.
367	7246	Orexin Receptor 1	Alpha Diagnostic Int.
369	7247	Orexin Receptor 2	Alpha Diagnostic Int.
371	8436	Platelet-Activating Factor Receptor	Cayman
371	8436	Platelet-Activating Factor Receptor	Santa Cruz
377	9421	Neuropeptide Y Receptor Type 1	Biogenesis
377	9421	Neuropeptide Y Receptor Type 1	DPC Biermann/Acris
379	9834	Corticotropin releasing factor Receptor 1	Research Diagnostics
379	9834	Corticotropin releasing factor Receptor 1	Santa Cruz
385	14198	Interleukin-8 Receptor B	Biosource
385	14198	Interleukin-8 Receptor B	R&D Systems
385	14198	Interleukin-8 Receptor B	Research Diagnostics
385	14198	Interleukin-8 Receptor B	Santa Cruz
387	14641	Calcitonin Receptor	Santa Cruz
389	16041	C-C Chemokine Receptor 6	Research Diagnostics
389	16041	C-C Chemokine Receptor 6	Santa Cruz
391	16599	Smoothened	Research Diagnostics
391	16599	Smoothened	Santa Cruz
397	17535	Gaba(b) Receptor 1	Alpha Diagnostic Int.
397	17535	Gaba(b) Receptor 1	Calbiochem
397	17535	Gaba(b) Receptor 1	Chemicon
397	17535	Gaba(b) Receptor 1	Santa Cruz
423	37498	Xenotropic and Polytropic Retrovirus Receptor (XPR1)	Santa Cruz
435	54053	Gaba(b) Receptor 2	Alpha Diagnostic Int.
435	54053	Gaba(b) Receptor 2	Chemicon
439	56923	Muscarinic acetylcholine Receptor M3	Biogenesis
439	56923	Muscarinic acetylcholine Receptor M3	Santa Cruz
457	152201	Thyrotropin Receptor	DPC Biermann/Acris
457	152201	Thyrotropin Receptor	Santa Cruz
459	152245	C-C Chemokine Receptor 2	Research Diagnostics
459	152245	C-C Chemokine Receptor 2	Santa Cruz
461	152299	Interleukin-8 Receptor A	Biosource
462	152299	Interleukin-8 Receptor A	Biosource
461	152299	Interleukin-8 Receptor A	R&D Systems
462	152299	Interleukin-8 Receptor A	R&D Systems
461	152299	Interleukin-8 Receptor A	Research Diagnostics
462	152299	Interleukin-8 Receptor A	Research Diagnostics
461	152299	Interleukin-8 Receptor A	Santa Cruz
462	152299	Interleukin-8 Receptor A	Santa Cruz
468	159973	Vasoactive Intestinal Polypeptide Receptor 1	Exalpha Biologicals
470	160040	Vasoactive Intestinal Polypeptide Receptor 2	Exalpha Biologicals
472	160055	Motilin Receptor (GPR38)	Santa Cruz

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503	160228	T-Cell Death-Associated Gene 8 (GPR65)	Santa Cruz
507	160312	Sphingolipid Receptor Edg5	Exalpha Biologicals
515	160329	Proteinase-Activated Receptor 4	Santa Cruz
535	161214	Galanin Receptor GalR3	Alpha Diagnostic Int.
537	161221	Urotensin-II Receptor (GPR14)	Santa Cruz
546	177168	Cysteinyl Leukotriene CYSLT1 Receptor	Cayman
548	177191	Histamine H3 Receptor	Alpha Diagnostic Int.
548	177191	Histamine H3 Receptor	Chemicon
552	180956	Lysophosphatidic Acid Receptor Edg7	Exalpha Biologicals
562	189900	Sphingolipid Receptor Edg8	Exalpha Biologicals
628	190774	Histamine H4 Receptor	Alpha Diagnostic Int.
628	190774	Histamine H4 Receptor	Chemicon
636	190955	Leukotriene B4 Receptor BLT1	Cayman

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ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: ANTIGENIC PEPTIDES, SUCH AS FOR G PROTEIN-COUPLED RECEPTORS (GPCRS), ANTIBODIES
THEREO, AND SYSTEMS FOR IDENTIFYING SUCH ANTIGENIC PEPTIDES

(57) Abstract: The present invention provides antigenic peptides for GPCRs and antibodies relating thereto, and related systems, methods, compositions, and the like, such as diagnostics and medicaments. Where antibodies against a given GPCR are not known, the present invention provides such antibodies, and preferred antigenic sequences for producing such antibodies. Where antibodies against a given GPCR are known, the present invention provides preferred antigenic peptides for producing antibodies that exhibit improved specificity, affinity or capacity to perform antibody-related actions relative to the known antibodies.

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INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 01/50107

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C12N15/12 C07K14/705 C07K16/28 G01N33/53

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EMBL, SEQUENCE SEARCH, EPO-Internal, WPI Data, BIOSIS, MEDLINE

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>ZHOU FENG C ET AL: "Production and characterization of an anti-serotonin 1A receptor antibody which detects functional 5-HT1A binding sites."</p> <p>MOLECULAR BRAIN RESEARCH, vol. 69, no. 2, 8 June 1999 (1999-06-08), pages 186-201, XP002222431 ISSN: 0169-328X figure 1; table 1</p> <p style="text-align: center;">--- -/--</p>	1-10, 15-26

☒ Further documents are listed in the continuation of box C.☐ Patent family members are listed in annex.

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"A" document defining the general state of the art which is not considered to be of particular relevance

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"P" document published prior to the international filing date but later than the priority date claimed

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"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

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"&" document member of the same patent family

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INTERNATIONAL SEARCH REPORT

International Application No

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>RAYMOND JOHN R ET AL: "Immunohistochemical mapping of cellular and subcellular distribution of 5-HT-1A receptors in rat and human kidneys." AMERICAN JOURNAL OF PHYSIOLOGY, vol. 264, no. 1 PART 2, 1993, pages F9-F19, XP001127496 ISSN: 0002-9513 the whole document, in particular figures 1, 3</p>	1-10, 15-26
Y	<p>--- VERDOT L ET AL: "PRODUCTION OF ANTI-PEPTIDE ANTIBODIES DIRECTED AGAINST THE FIRST AND THE SECOND EXTRACELLULAR LOOP OF THE HUMAN SEROTONIN 5-HT1A RECEPTOR" BIOCHIMIE, MASSON, PARIS, FR, vol. 76, no. 1, 1994, pages 165-170, XP008009332 ISSN: 0300-9084 the whole document</p>	1-10, 15-26
Y	<p>--- TODD E ANTHONY AND EFRAIAN C AZMITIA: "Molecular characterization of antipeptide antibodies against the 5-HT1A receptor: Evidence for state-dependent antibody binding." MOLECULAR BRAIN RESEARCH, vol. 50, no. 1-2, 15 October 1997 (1997-10-15), pages 277-284, XP002222432 ISSN: 0169-328X the whole document</p>	1-10, 15-26
A	<p>--- ECKARD C P ET AL: "CHARACTERISATION OF G-PROTEIN-COUPLED RECEPTORS BY ANTIBODIES" CURRENT MEDICINAL CHEMISTRY, BENTHAM SCIENCE PUBLISHERS BV, BE, vol. 7, no. 9, September 2000 (2000-09), pages 897-910, XP000984970 ISSN: 0929-8673 the whole document</p>	1-10, 15-26
A	<p>--- BACKSTROM JON R ET AL: "Generation of anti-peptide antibodies against serotonin 5-HT2A and 5-HT2C receptors." JOURNAL OF NEUROSCIENCE METHODS, vol. 77, no. 1, 7 November 1997 (1997-11-07), pages 109-117, XP002222433 ISSN: 0165-0270 the whole document</p> <p>--- -/--</p>	1-10, 15-26

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 01/50107

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>EASON MARGARET G ET AL: "Identification of a G-s coupling domain in the amino terminus of the third intracellular loop of the alpha-2A-adrenergic receptor: Evidence for distinct structural determinants that confer G-s versus G-i coupling." JOURNAL OF BIOLOGICAL CHEMISTRY, vol. 270, no. 42, 1995, pages 24753-24760, XP002222434 ISSN: 0021-9258 the whole document -----</p>	1-10, 15-26

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US 01/50107

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

Although claims 19 and 20 are directed to a diagnostic method practised on the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-10, 15-26 (all partially)

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

Invention 1: claims 1-10, 15-26, all partially

an isolated antigenic peptide having the amino acid sequence
SEQ ID NO: 692, nucleic acids encoding said peptide,
antibodies directed against said peptide, kits containing
said antibodies

Inventions 2 to 1600: claims 1-26,
all partially and in so far as applicable

each separate, individual invention relates to an isolated
antigenic peptide, nucleic acids encoding said peptide,
antibodies directed against said peptide, kits containing
said antibodies,
wherein invention 2 is represented by the peptide having the
amino acid sequence SEQ ID NO: 693,
invention 3 is represented by the peptide having the amino
acid sequence SEQ ID NO: 694,
continuing to invention 1600, which is represented by the
peptide having the amino acid sequence SEQ ID NO: 2292

Invention 1601: claims 27-66

a method of identifying an amino acid sequence of an
antigenic peptide derived from a candidate polypeptide,
peptides identified by that method, antibodies directed
against said peptides